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BL

BRITISH ZOOLOGY.

CLASS I. QUADRUPEDS.

II. BIRDS.

Si qui veró ſint in urbe ſua Hoſpites, in Patria ſua Peregrini, et cognitione ſemper pueri eſſe velint, ſibi per me placeant, ſibi dormiant; non ego illis hæc conſcripſi, non illis vigilavi.

Camden. Britan. Præfat.

VOL. I.

LONDON:

PRINTED FOR BENJAMIN WHITE,
AT HORACE'S HEAD, FLEET-STREET.

MDCC LXVIII.

Jos. Banks

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PREFACE.

AT a time, when the ſtudy of natural hiſtory ſeems to revive in *Europe*; and the pens of ſeveral illuſtrious foreigners have been employed in enumerating the productions of their reſpective countries, we are unwilling that our own iſland ſhould remain inſenſible to its particular advantages; we are deſirous of diverting the aſtoniſhment of our countrymen at the gifts of nature beſtowed on other kingdoms, to a contemplation of thoſe with which (at leſt with equal bounty) ſhe has enriched our own.

A judicious Foreigner has well remarked, that an Engliſhman is excuſable ſhould he be ignorant of the papal hiſtory, where it does not relate to *Great-Britain*; but inexcuſable ſhould he neglect inquiries into the origin of parlements, the limitation of the royal prerogative, and the gradual deviation from the feodal to the preſent ſyſtem of government.

The obſervation is certainly juſt, and the application appears too obvious to be pointed out; yet the generality of mankind can reſt contented with ignorance of their native ſoil, while a paſſion for novelty attracts them to a ſuperficial examination of the wonders of *Mexico*, or *Japan*; but theſe ſhould be told, that ſuch a paſſion is a ſure criterion of a weak judgement: utility, truth and certainty,

ſhould alone be the point at which ſcience ſhould aim; and what knowlege can be more uſeful than of thoſe objects with which we are moſt intimately connected? and where can we reaſon with greater certainty on ſuch points, than in our own country, where a conſtant recourſe may be had to the ſpecimen of what we have under conſideration? But theſe, and many other arguments for examining into the productions of our own iſland, may here be waved, as the admirable LINNÆUS has diſplayed them at large in an oration* which for maſterly reaſoning, and happy ingenuity, may vie with the beſt compoſitions.

Yet, as that great naturaliſt has, in the ſame tract, publiſhed an eulogium on *Sweden*; and as an incitement to his countrymen to apply themſelves to the ſtudy of nature, enumerated the natural productions of that kingdom; we ſhall here attempt a parallel, and point out to the *Britiſh* reader, his native riches; many of which were probably unknown to him, or perhaps ſlightly regarded.

Do the heights of *Torſburg*, or *Swucku* afford more inſtruction to the naturaliſt than the mountains of *Cumberland*, or *Caernarvonſhire*? whoſe ſides are covered with a rich variety of uncommon vegetables, while their bowels are replete with the moſt uſeful minerals. The *Derbyſhire* hills, abounding in all the magnificence of caves and cliffs; the

* *Amæn. acad. tom.* 2. p. 409. *Stillingfleet's Sweediſh tracts.* tr. 1.

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mountains of *Kerry*, and that ſurprizing harbour the *Bullers* of *Buchan* * may well be oppoſed to the rocks of *Blackulla*, or the caverns of *Skoula*. *Sweden* can no where produce a parallel to that happy combination of grandeur and beauty in *Keſwick* † vale, or *Killarny* ‡ lake; nor can *Europe* ſhew a natural wonder equal to the *Giant's Cauſeway* in the north of *Ireland*.

The excellence and number of our ſprings (whether medicinal or incruſting) are well known to common inquirers.

Our minerals are as great in quantity, as rich in quality: of gold, indeed we cannot produce many ſpecimens, yet ſufficient to ſhew that it is found in this iſland §; but ſilver is found in great abundance in our lead ores, and veins of native ſilver in the copper ores of *Muckrus*, on the lake of *Killarny*. The hæmatites iron ores of *Cumberland*, and the beautiful columnar iron ores of the foreſt of *Dean*, are ſufficient to diſplay our riches in that uſeful commodity. No country produces ſo great a quantity of tin as *Cornwall*, and that county, and ſeveral others in the north

* Between *Aberdeen* and *Peterhead*.

† In *Cumberland*.

‡ In the County of *Kerry*.

§ That our country produces gold, appears in Dr. *Borlaſe's* excellent hiſtory of *Cornwall*, p. 214. ſolate as the year 1753 ſeveral pieces were found in what the miners call *ſtream tin*; one ſpecimen was as thick as a gooſe quill; others weighed to the value of ſeventeen ſhillings, twenty ſeven ſhillings: and another even to the value of three guineas.

have been long noted for their inexhauſtible veins of copper; nor leſs famous are the lead mines of *Derbyſhire*, *Cardiganſhire* and *Flintſhire*, which have been worked for ages, yet ſhew no ſign of the decline of their ſtores.

In all theſe, nature ſports with great luxuriancy; the cryſtallized lead ore of *Tralee* *, the fibrous lead ore of *Tipperary*; the laminated lead ore of *Lord Hoptoun*'s mines; the cryſtalized tins, and the figured ores of *Zink*, are equally noted for their elegance, ſcarcity, and richneſs.

The ore of *Zink*, or *Lapis Calaminaris*, is found in vaſt quantities in the counties of *Somerſet* and *Flint*; while *black lead* or *wadd*, a ſubſtance ſcarce known in other kingdoms, abounds in the mountains of *Cumberland*.

To the *Swediſh Petroleum*, we may oppoſe the Well at *Pitchford*, and that of *St. Catherine*'s near *Edenburg*; our amber and our jet, together with our inexhauſtable ſtrata of coal found in ſo many parts of this kingdom, will, in the article of bitumens, give us the ſuperiority over theſe ſo much boaſted productions of *Sweden*.

To avoid a tedious enumeration, we ſhall only mention our wonderful mines of rock ſalt; our allum and our vitriol works; our various marbles, alabaſters, and ſtones; our moſt excellent clays and earths †; all which,

* In the county of *Kerry*.

† If the inquiſitive reader is deſirous of a farther account of the number and excellence of our ſubterraneous productions,

articles, and many more unnoted here, might have furniſhed us with an ample field for panegyric,

Our botanical productions are not leſs abundant, but the works of *Ray*, which have lately been much enlarged and methodized, according to the *Linnæan* ſyſtem, by the ingenious Mr. *Hudſon*, in his *Flora Anglica*, are a ſufficient diſplay of our vegetable riches.

Our Zoology would be a copious ſubject to enlarge on, but the work in hand reſtrains us from anticipating our readers curioſity. We might expatiate on the clouds of *Soland* geeſe which breed on the *Baſs iſland*, or *Puffins* on that of *Prieſtholme*: on our fiſh, and other marine animals; on our inſects, and the various other ſenſitive productions of this kingdom; but we forbear a parade of uſeleſs declamation, and ſhall only add, that as few countries receive more advantages from their natural breed of quadrupeds, unmixed with any beaſt that preys on man, ſo, few can boaſt a greater variety of birds, whether local, or migratory.

This is a general view of the natural hiſtory of our own country; why then ſhould we neglect inquiring into the various benefits that reſult from theſe inſtances of the wiſdom of our Creator, which his divine munificence has ſo liberally, and ſo immediately placed before us? Such a neglect is certainly highly to be

tions, we refer him to the learned Dr. *Woodward*'s catalogue of the *Engliſh Foſſils*, *London* 1729, particularly to p. 5.

blamed, for (to expreſs ourſelves in the words of an eminent writer) " the Creator did not " beſtow ſo much curioſity, and workman- " ſhip upon his creatures, to be looked on " with a careleſs incurious eye, eſpecially to " have them ſlighted or contemned; but to " be admired by the rational part of the world, " to magnify his own power to all the world, " and the ages thereof; and ſince the works " of the creation are all of them ſo many de- " monſtrations of the infinite wiſdom and " power of God, they may ſerve to us, as ſo " many arguments, exciting us to a conſtant " fear of the Deity, and a ſteady and hearty " obedience to all his laws".*

Much might be added to this ſubject, if conſidered in a theological light; but ſince the writings of *Boyle*, *Ray*, and *Derham*, fully prove that the ſtudy of natural hiſtory enforces the theory of religion and practice of morality, we had better refer to their works in general, than mangle them by imperfect quotations.

To exalt our veneration towards the Almighty, is the principal end of this ſublime ſcience; and next to that, the various benefits reſulting from it to human ſociety deſerve our ſerious conſideration.

To give an obvious inſtance: what wonderful changes have been made in human affairs by the diſcovery of an obſcure mineral. The antients, ignorant of the application of

* *Derham*'s Phyſ. theol. book XI. c. 2 4.

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the magnet, timidly attempted a mere coasting navigation; while we, better informed of the uſes of it, traverſe the wideſt oceans, and by the diſcovery of the new world, have layed open to ſcience, an inexhauſtible fund of matter.

The riſe and progreſs of medicine, kept pace with the advancement of this moſt important diſcovery; and tho' neceſſity was the parent of the mechanic arts, yet they alſo throve, and grew to maturity, under the ſame influence.

Many more inſtances might be added to this brief view of the utility of natural knowledge; but we ſhall only give ſome of its uſes in the polite arts, which have hitherto been too little connected with it.

To inſtance particularly in painting, its uſes are very extenſive: the permanency of colors depends on the goodneſs of the pigments; but the various animal, vegetable, and foſſil ſubſtances (out of which they are made) can only be known by repeated trials; yet the greateſt artiſts have failed in this reſpect: the ſhadows of the divine *Raphael* have acquired an uniform blackneſs, which obſcures the fineſt productions of his pencil, while the paintings of *Holbein*, *Durer*, and the *Venetian ſchool*, (who were admirably ſkilled in the knowledge of pigments) ſtill exiſt in their primitive freſhneſs.

But theſe advantages are ſmall, compared to thoſe derived from the knowledge of nature in the repreſentation of objects: painting is an imitation of nature; now, who can imitate without conſulting the original? but to

come to what is more particularly the object of our inquiries; animal and vegetable life are the eſſence of landſcape, and often are ſecondary objects in hiſtorical paintings; even the ſculptor in his limited province would do well to acquire a correctneſs of deſign with a perfect knowledge of the muſcles of animals. But the painter ſhould have all this and more; he ſhould be acquainted with all their various tints, their manner of living, their peculiar motions or attitudes, and their places of abode*, or he will fall into maniteſt errors.

Plurimus inde labor tabulas imitando juvabit
Egregias, operumque typos, ſed plura docebit
Natura ante oculos præſens, nam firmat et auget
Vim genii, ex illâque artem experientia complet.†

Deſcriptive poetry is ſtill more indebted to natural knowledge, than either painting or ſculpture: the poet has the whole creation for his range; nor can his art exiſt without borrowing metaphors, alluſions, or deſcriptions from the face of nature, which is the only fund of great ideas. The depths of the ſeas, the internal caverns of the earth, and the planetary ſyſtem are out of the painter's reach, but can ſupply the poet with the ſublimeſt conceptions: nor is the knowledge of animals

* That great artiſt, Mr. *Ridinger*, of *Auſburgh*, exceeds all others in the three laſt particulars; nothing can equal his prints of animals for propriety of attitudes, for a juſt idea of their way of life, and for the beautiful and natural ſcenery that accompanies them. His fineſt works are, his *Wilde Thiere*, *Kleine Thiere*, and *Jagdbare Thiere*; but there are ſcarce any of his performances that can fail giving pleaſure to all admirers of nature repreſented as herſelf.

† *Freſnoy de arte graph. lin.* 537.

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and vegetables leſs requiſite, while his creative pen adds life and motion to every object.

From hence it may be eaſily inferred, that an acquaintance with the works of nature is equally neceſſary to form a genuine and correct taſte for any of the above mentioned arts. Taſte is no more than a quick ſenſibility of imagination refined by judgement, and corrected by experience; but experience is another term for knowledge *, and to judge of natural images, we muſt acquire the ſame knowledge, and by the ſame means as the painter, the poet, or the ſculptor.

Thus far natural hiſtory in general ſeems connected with the polite arts; but were we to deſcend into all its particular uſes in common life, we ſhould exceed the bounds of a preface: it will be therefore neceſſary to confine our inquiries to the inveſtigation of a ſingle part of the material world, which few are ſo ignorant as not to know is divided into the animal, vegetable, and foſſil kingdoms.

Vaſt would be the extent of the inquiries into each of theſe; but tho' ambition may tempt us to pervade the whole field of ſcience, yet a little experience will open to our views the immenſe tracts of natural knowlege, and we ſhall find it an arduous taſk only to inveſtigate a ſingle province, ſo as to ſpeak with preciſion and certainty; without which there can be no real improvements in natural hiſtory.

* See the eſſay on the origin of our ideas of the ſublime and beautiful.

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For theſe reaſons, a partial examination of this ſcience is all that a conſiderate mind will aim at, which may perhaps be moſt naturally guided to give the preference to the moſt exalted ſubject of it.

Zoology is the nobleſt part of natural hiſtory, as it comprehends all ſenſitive beings, from reaſoning man, through every ſpecies of animal life, till it deſcends to that point where ſenſe is wholly extinct, and vegetation commences: and certainly none will deny, that life, and voluntary motion are ſuperior to a mere vegetating principle, or the more inactive ſtate of the foſſil kingdom.

Should we follow the train of reflections which naturally ariſe from the contemplation of animals, they would ſwell this preface into a volume: and ſhould we only mention the various uſes of *Britiſh* animals in common life yet even theſe would greatly exceed the bounds to which we have thought it right to limit ourſelves. The knowlege of *Dietetics* is a neceſſary branch of medecine, as by a proper attention to that article, an obſtinate diſtemper may be eradicated, when common remedies have failed; but this can never be attained, without the ſtudy of Zoology, which aſſiſts us greatly in learning the different qualities of animal food; and how far a difference of nutriment may contribute to cure the diſeaſe.

Cloathing is eſſential, not only to our comfort, but ſubſiſtence; and the number of our

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manufactures, relative to this ſingle article, demand our care for their extenſion and improvement; eſpecially as the maintenance of thouſands depends on theſe important branches of commerce; yet theſe may be enlarged, by diſcovering new properties in animals, or by the farther cultivation of thoſe already diſcovered. The ſcience of Zoology is requiſite for each of theſe; and if we reflect but a little on the unwearied diligence of our rivals the *French*, we ſhould attend to every ſiſter ſcience that may any ways preſerve our ſuperiority in manufactures and commerce.

Domeſtic œconomy is an object of equal conſequence; and the author * of the *Calendar of Flora* has eſtabliſhed the uſes of Zoology in this particular, with undeniable evidence. This excellent writer has united a happy invention, with the moſt ſolid judgment, and certainly merits the higheſt commendations, as a friend of human kind. Our ingenious countryman, Mr. *Stillingfleet*, in the ſame year has purſued almoſt the ſame plan as far as his time would permit, with equal ſucceſs, and manifeſtly proved the utility of the project, in a learned diſcourſe prefixed to his work †.

If then Zoology can ſuggeſt ſo many hints towards enlarging and improving our manufactures and agriculture; we ſhall not think our time miſapplied, in offering to the publick,

* *Alex. Mal. Berger.*

† *Swediſh* tracts, tranſlated from the *amæn. Acad.* 2d Edition.

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the NATURAL HISTORY of the *Quadrupeds* and *Birds* of GREAT-BRITAIN and IRELAND. This compilation had its peculiar difficulties; but the labor of travelling thro' a dry arrangement of the ſubject, was very frequently alleviated by the beautiful ſpecimens we met with in our progreſs: beſides, we own with pleaſure that we have been greatly aided by the lovers of natural hiſtory, who ſince the appearance of the firſt edition have contributed to enrich the preſent with ſeveral valuable obſervations; by collecting and digeſting theſe materials, we have not only rendered the work more complete, but are alſo encouraged to trace the *Britiſh Zoology* thro' ſome of the remaining claſſes, with all poſſible ſpeed.

Let therefore every merit that may appear in the preſent edition, and every error that may have been ſuppreſſed from the former, be attributed to the kind informations we have received from our learned and ingenious friends; among whom we are ambitious of naming, the honourable Mr. *Daines Barrington*, *William Conſtable*, eſq; *Joſeph Banks*, eſq; *Benjamin Stillingfleet*, eſq; the Reverend Doctor *William Borlaſe*, *Thomas Falconer*, eſq; of *Cheſter*, *Thomas Tofield* of *Yorkſhire*, eſq; Mr. *Plymly* of *Longnor*, *Shropſhire*, Mr. *Thomas Bolton*, of *Worlyclouh*, *Yorkſhire*, the Reverend Mr. *Farrington* of *Dynas*, *Caernarvonſhire*, *Owen Holland*, eſq; of *Conway*, *Henry Seymer*, eſq; of *Hanford*, *Wilts*, Doctor *Lyſons* of *Gloceſter*, Doctor *Solander*, of the *Muſeum*, Mr.

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Peter Collinſon, the Reverend Mr. *White* of *Selborn, Hants*; and that Father of *Britiſh* Ornithologiſts Mr. *George Edwards* of the college of Phyſicians.

In the proſecution of our plan, we ſhall, to avoid the perplexity, ariſing from forming a new ſyſtem, adopt (as far as relates to the *Quadrupeds* and *Birds*) that of the inеſtimable *Ray*, who advanced the ſtudy of nature far beyond all that went before him; and whoſe abilities, integrity, and mildneſs, were no leſs an ornament to the human ſpecies in general, than to his own country in particular. Yet, as this excellent man was in a manner the founder of ſyſtematic Zoology, ſo later diſcoveries have made a few improvements on his labors: wherever then he is miſtaken in the arrangement of animals, we ſhall follow the method of M. *Briſſon*; whoſe merit, as a ſyſtematic writer is not yet known; or at leſt, not ſufficiently acknowleged among us *.

We have, in our deſcriptions, wholly omitted the anatomy of animals; as that part, unleſs executed with the greateſt ſkill, would be no ſmall blemiſh to the reſt of this performance; but the reader may judge of the extent of our plan, by the following heads: the character of the genus ſhall firſt be mentioned: then the ſpecific name: the ſynonyms from different authors; and the genera in which thoſe authors have placed the animal. The

* Le Regne Animal. *Paris* 1756. 4to. Ornithologie, contenant la diviſion des oyſeaux, &c. *Paris* 1760, 1762. 6 tom. 4to.

names ſhall be given in ſeveral *European* languages *; and we ſhall conclude with a brief, but ſufficient deſcription, adding at the ſame time, the various uſes, and natural hiſtory of each individual.

If this plan ſucceeds, in promoting the knowledge of nature in this kingdom, we ſhall think ourſelves amply rewarded. Could our exhortations avail, we ſhould recommend this ſtudy moſt earneſtly to every country gentleman. To thoſe of an active turn, we might ſay, that ſo pleaſing and uſeful an employment would relieve the *tædium* ariſing from a ſameneſs of diverſions; every object would produce ſome new obſervation, and while they might ſeem only to gratify themſelves with a preſent indulgence, they would be laying up a fund of uſeful knowlege; they would find their ideas inſenſibly enlarged, till they comprehended the whole of domeſtic œconomy, and the wiſe order of Providence.

To thoſe of a ſedentary diſpotion, this ſtudy would not only prove agreeable, but ſalutary; man of that turn of mind are with difficulty drawn from their books, to partake of the neceſſary enjoyments of air and exerciſe; and even when thus compelled, they profit leſs by

* In the ornithology the *European* names are prefixed to the author referred to in the ſynonyms,

Italian	to	Aldrovand, Olina, or Zinanni.
French		Briſſon
German		Geſner or Kramer
Swediſh		the Fauna Suecica
Daniſh and *Norwegian*		Brunnich.

it than men of an illiberal education. But this inconvenience would be remedied, could we induce them to obſerve and reliſh the wonders of nature; aided by philoſophy, they would find in the woods and fields a ſeries of objects, that would give to exerciſe charms unknown before; and enraptured with the ſcene, they will be ready to exclaim with the poet.

On every thorn, delightful wiſdom grows;
In every rill, a ſweet inſtruction flows. *Young.*

Thus would the contemplative naturaliſt learn from all he ſaw, to love his Creator for his goodneſs; to repoſe an implicit confidence in his wiſdom; and to revere his awful omnipotence. We ſhall dwell no longer on this ſubject, than to draw this important concluſion; that health of body, and a chearful contentment of mind, are the general effects of theſe amuſements. The latter is produced by a ſerious and pleaſing inveſtigation of the bounties of an all-wiſe and beneficent Providence; as conſtant and regular exerciſe is the beſt preſervative of the former.

Downing, Feb. 1, 1768. *THO. PENNANT.*

Explanation of References.

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Alb.	Nat. Hiſt. of Birds, by *Eleazer Albin*, 3 vol. 4to. *London*, 1738.
Aldr. av.	*Ulyſſis Aldrovandi* Ornithologia, fol. *Francofurti*, 1610, 1613.
Amæn. acad.	*Caroli Linnæi* Amænitates Academicæ, 6 tom. 8vo. *Lugd. Bat.* & *Holmiæ*, 1749, &c.
Ariſt. hiſt.	*Ariſtotelis* Hiſtoria de Animalibus, *Julio Cæſare Scaligero* interprete, fol. *Toloſæ*, 1619.
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Br. or *Brunnich*	M. Th. *Brunnichii* Ornithologia Borealis, 8vo. *Copenhagen*, 1764.
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Caii opuſc.	*Joannis Caii* Britanni Opuſcula, a *S. Jebb* edita, 8vo. *Londoni*, 1729.
Camden	*Camden*'s Britannia, publiſhed by Biſhop *Gibſon*, 2 vol. fol. 3d edition, *London*, 1753.
Cat. Carol.	Nat. Hiſt. of *Carolina* and the *Bahama* Iſlands, by *Mark Catesby*, 2 vol. fol. *London*, 1731.
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Cluſ. ex.	*Caroli Cluſii* Exoticorum Libri X. fol. *Antverpiæ*, 1605.
Crantz's Greenl.	Hiſtory of *Greenland*, &c. by *David Crantz*. Tranſlated from the *High Dutch*. 2 vol. 8vo. *London*, 1767.
Dale's hiſt.	of *Harwich* and *Dover-court*, by *Sam. Dale*, 4to. *London*, 1730.
Egede's Greenl.	Deſcription of *Greenland*, by *Hans Egede*, Miſſionary in that Country for twenty Years. Tranſlated from the *Daniſh*, 8vo. *London*, 1745.
Edw.	Nat. Hiſt. of Birds and other rare and undeſcribed Animals, by *George Edwards*, 7 vol. 4to. *London*, 1743, &c.
Faun. Suec.	*Caroli Linnæi* Fauna Suecica, ſiſtens Animalia *Sueciæ* Regni, 8vo. *Holmiæ*, 1761.
Geſner quad.	*Conrad. Geſneri* Hiſtoria Quadrupedum, fol. *Frankfort*, 1603.
Geſner av.	*Geſner* de Avium Natura, fol. *Francofurti*, 1585.

Geſner icon.	Icones Animalium Quadr. vivip. & ovip. quæ in Hiſt. Animalium *Conradi Geſneri* Libri I. & II. deſcribuntur, fol. *Tiguri*, 1560.
Girald. Cam.	Itinerarium *Cambriæ*, Auctore *Sil. Giraldo Cambrenſe*, cum Annot. *Poveli*, fol. *Londoni*, 1585.
Grew's muſ.	Catalogue of the Rarities belonging to the Royal Society, by Dr. *N. Grew*, fol. *London*, 1685.
Gunner	Det *Trondhiemſte* Gelſkabs Skrifter, *Kiobenthavn*, 1761.
Haſſelquiſt's itin.	*Fred. Haſſelquiſtii* Iter Palæſtinum, 8vo. *Holmiæ*, 1757.
Hor. Ice.	Nat. Hiſt. of *Iceland*, by *N. Horrebow*, tranſlated from the *Daniſh*, fol. *London*, 1758.
Jonſton's Nat. Hiſt.	*Johannis Jonſtoni*, M. D. Hiſtoria Naturalis, 2 tom. fol. *Amſtelodami*, 1657.
Klein quad.	*Jac. Theod. Klein* Quadrupedum Diſpoſitio, breviſque Hiſt. Nat. 4to. *Lipſiæ*, 1751.
Klein av.	*J. Theod. Klein* Hiſtoriæ Avium Prodromus, 4to. *Lubecæ*, 1750.
Klein ſtem.	*J Theod. Klein* Stemmata avium, 4o Tabulis Æneis ornata, 4to. *Lipſiæ*, 1759.
Kramer	*Gulielmi Henrici Kramer* Elenchus Vegetabilium & Animalium per *Auſtriam Inferiorem* obſervatorum, 8vo. *Viennæ*, *Pragæ* & *Tergeſti*, 1756.
Lin. ſyſt.	*Caroli Linnæi* Syſtema Naturæ, edit. 12, reformata, 8vo. *Holmiæ*, 1766.
Marten's Spitzberg.	Voyage into *Spitzbergen* and *Greenland*, by *Fred. Marten*, *London*, 1694.
Martin's Weſt. Iſles.	Deſcription of the Weſtern Iſlands of *Scotland*, by *M. Martin*, 2d edit. 8vo. *London*, 1716.
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Pontoppidan — Nat. Hiſt. of *Norway*, by the right reverend *Eric Pontoppidan*, Biſhop of *Bergen*, tranſlated from the *Daniſh*, fol. *London*, 1755.

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Raii ſyn. av. — *Raii* Synopſis methodica Avium & Piſcium, 8vo. *London*, 1713.

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Sib.

Sib. muſ. — *Alberti Sebæ* Rerum Naturalium Theſaurus, 4 tom. fol. *Amſterdam*, 1734, &c.

Sib. Scot. — Prodromus Hiſtoriæ Naturalis Scotiæ, Auctore *Roberto Sibbaldo*, M.D. Eq. Aur. fol. *Edinburgi*, 1684.

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CLASS

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QUADRUPEDS.

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Diviſion II,

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Urit enim fulgore ſuo qui prægravat artes
Infra ſe poſitas.

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BRITISH ZOOLOGY.

Claſs I. QUADRUPEDS.

Div. I. HOOFED QUADRUPEDS.

Genus I. The HORSE.

Species I. The HORSE.

Raii ſyn. quad. 62.
Merret pinax. 166.
Geſn. quad. 404.
Klein quad. 4.
De Buffon iv. 174.

Equus auriculis brevibus erectis, juba longa. *Briſſon quad.* 69.
Eq. Caballus. *Lin. ſyſt.* 100.
Eq. cauda undique ſetoſa. *Faun. Suec.* 47.
Br. Zool. i.

NAMES.

	Horse.	Mare.	Gelding.
Brit.	March, Ceffyl	Caſeg	Diſpaiddfarch
Fren.	Le Cheval	La Cavale, Jument	Cheval ongre
Ital.	Cavallo	Cavalla	
Span.	Cavallo	Yegua	
Port.	Cavallo	Egoa	
Germ.	Pferdt	Stut, Motſch	
Dut.	Paerd, Hengſt	Merrie	
Swed.	Hæſt	Stood, Horſs	
Dan.	Hæſt, Oeg; Hingſt	Stod-Hæſt, Hoppe	

THE breed of horſes in *Great Britain* is as mixed as that of its inhabitants: The frequent introduction of foreign horſes has given us a variety, that no ſingle country can boaſt of: moſt other kingdoms produce only one kind, while ours, by a judicious mixture of the ſeveral ſpecies, by the happy difference of our ſoils, and by our ſuperior ſkill

in management, may triumph over the reſt of *Europe*, in having brought each quality of this noble animal to the higheſt perfection.

In the annals of *Newmarket*, may be found inſtances of horſes that have literally out-ſtripped the wind, as the celebrated *M. Condamine* has lately ſhewn in his remarks * on thoſe of *Great Britain*. *Childers* † is an amazing inſtance of rapidity, his ſpeed having been more than once exerted equal to 82 ½ feet in a ſecond, or near a mile in a minute: The ſame horſe has alſo run the round courſe at *Newmarket*, (which is about 400 yards leſs than 4 miles) in ſix minutes and forty ſeconds; in which caſe his fleetneſs is to that of the ſwifteſt *Barb*, as four to three.

Horſes of this kind, derive their origin from *Arabia*; the ſeat of the pureſt, and moſt generous breed.

The ſpecies uſed in hunting, is a happy combination of the former with others ſuperior in ſtrength, but inferior in point of ſpeed and lineage: an union of both is neceſſary; for the fatigues of the chace muſt be ſupported by the ſpirit of the one, as well as by the vigor of the other.

No country can bring a parallel to the ſtrength and ſize of our horſes deſtined for the draught; or to the activity and ſtrength united of thoſe that form our cavalry.

In our capital there are inſtances of ſingle horſes that are able to draw on a plain, for a ſmall ſpace,

* In his tour to Italy.

† M. *Condamine* illuſtrates his remarks with the horſe, *Starling*; but the report of his ſpeed being doubtful, we chuſe to inſtance the ſpeed of *Childers*, as indiſputable and univerſally known.

the weight of three tuns; but could with eaſe, and for a continuance draw half that weight *. The pack-horſes of *Yorkſhire*, employed in conveying the manufactures of that county, to the moſt remote parts of the kingdom, uſually carry a burden of 420 pounds; and that indifferently over the higheſt hills of the north, as well as the moſt level roads; but the moſt remarkable proof of the ſtrength of our *Britiſh* horſes, is to be drawn from that of our mill-horſes: ſome of theſe will carry at one load thirteen meaſures, which at a moderate computation of 70 pounds each, will amount to 910; a weight ſuperior to that which the leſſer ſort of camels will bear: this will appear leſs ſurpriſing, as theſe horſes are by degrees accuſtomed to the weight; and the diſtance they travel no greater than to and from the adjacent hamlets.

Our cavalry in the late campaigns, (when they had opportunity) ſhewed over thoſe of our allies, as well as of the *French*, a great ſuperiority both of ſtrength and activity: the enemy was broken through by the impetuous charge of our ſquadrons; while the *German* horſes, from their great weight, and inactive make, were unable to ſecond our efforts; though thoſe troops were actuated by the nobleſt ardor.

The preſent cavalry of this iſland only ſupports its ancient glory; it was eminent in the earlieſt times; our ſcythed † chariots, and the activity ‡ and good

* *Hollingſhed* makes it a matter of boaſt, that in his time, five horſes could draw with eaſe for a long journey 3000 lb. weight.

† *Covinos* vocant, quorum falcatis axibus utuntur. *Pomp. Mela*, lib. iii. c. 6.

‡ *Cæſar. Com.* lib. iv. *Strabo.* lib. iv.

diſcipline of our horſes, even ſtruck terror into *Cæſar*'s legions: it is now impoſſible to trace out this ſpecies; for thoſe which exiſt among the *indigenæ* of *Great Britain*, ſuch as the little horſes of *Wales* and *Cornwal*, the hobbies of *Ireland*, and the ſhelties of *Scotland*, though admirably well adapted to the uſes of thoſe countries, could never have been equal to the work of war. Thoſe we employ for that purpoſe, or for the draught, are an off-ſpring of the *German* or *Flemiſh* breed, meliorated by our ſoil, and a judicious culture.

The *Engliſh* were ever attentive to an exact culture of theſe animals; and in very early times ſet a high value on their breed. The eſteem that our horſes were held in by foreigners ſo long ago as the reign of *Athelſtan*, may be collected from a law of that monarch prohibiting their exportation, except they were deſigned as preſents. Theſe muſt have been the native kind, or the prohibition would have been needleſs, for our commerce was at that time too limited to receive improvement from any but the *German* kind, to which country their own breed could be of no value.

But when our intercourſe with the other parts of *Europe* was enlarged, we ſoon layed hold of the advantages this gave of improving our breed. *Roger de Beleſme*, Earl of *Shrewſbury* *, is the firſt that is on record: he introduced the *Spaniſh* ſtallions into his eſtate in *Powiſland*, from which that part of *Wales* was for many ages celebrated for a ſwift and generous

* Created by *William* the *Conqueror*.

race

race of horſes. *Giraldus Cambrenſis*, who lived in the reign of *Henry* II. takes notice of it, and *Michael Drayton*, cotemporary with *Shakeſpear*, ſings their excellence in the ſixth part of his *Polyolbion*. This kind was probably deſtined to mount our gallant nobility, or courteous knights for feats of *Chivalry*, in the generous conteſts of the tilt-yard. From theſe ſprung, to ſpeak the language of the times, the *Flower* of *Courſers*, whoſe elegant form added charms to the rider; and whoſe activity and managed dexterity gained him the palm in that field of gallantry and romantic honour. That this was the chief object of cultivating the mixed breed, is very probable, for racing in its *preſent* form was not introduced into *England*, till the reign of *James* I. the earlieſt notice we have of the diverſion being in that reign. *Croydon* in the ſouth *, and *Garterly* † in *Yorkſhire*, were then famous horſe-courſes. That it was not in vogue in the preceding reign, is reaſonable to imagine, for among the numerous entertainments exhibited at *Kenelworth* by *Elizabeth*'s favourite on her viſit there, and when no amuſement then practiſed was omitted, we do not find horſe-racing among them.

Not that we deny this diverſion to be known in theſe kingdoms in earlier times; we only aſſert a different mode of it, gentlemen being then their own jockies, and riding their own horſes. Lord *Herbert* of *Cherbury* enumerates it among the ſports that gallant philoſopher thought unworthy of a man of honour. "The "exerciſe, (ſays he) I do not approve of, is running

* *Oſborn*'s works, 452. † *Drayton*'s *Polyolbion*, ſong 3d.

" of horſes, there being much cheating in that kind;
" neither do I ſee why a brave man ſhould delight
" in a creature whoſe chief uſe is to help him to run
" away *."

The increaſe of our inhabitants, and the extent of our manufactures, together with the former neglect of internal navigation to convey thoſe manufactures, multiplied the number of our horſes: an exceſs of wealth, before unknown in theſe iſlands, increaſed the luxury of carriages, and added to the neceſſity of an extraordinary culture of theſe animals: their high reputation abroad, has alſo made them a branch of commerce, and proved another cauſe of their vaſt increaſe.

As no kingdom can boaſt of parallel circumſtances, ſo none can vie with us in the number of theſe noble quadrupeds; it would be extremely difficult to gueſs at the exact amount of them, or to form a periodical account of their increaſe: the number ſeems very fluctuating: *William Fitz-Stephen* relates, that in the reign of King *Stephen*, *London* alone poured out 20,000 horſemen in the wars of thoſe times: yet we find that in the beginning of Queen *Elizabeth*'s reign †, the whole kingdom could not ſupply 2000 horſes to form our cavalry: and even in the year 1588, when the nation was in the moſt immi-

* The life of *Edward* Lord *Herbert* of *Cherbury*, publiſhed by Mr. *Walpole*, p. 51.

Jarvis Markham, who wrote on the management of horſes 1599, mentions running horſes; but thoſe were only deſigned for matches between gentleman and gentleman.

† Vide Sir *Edward Harwood*'s memorial. *Harleian Miſc.* iv. 255.

nent

nent danger from the *Spaniſh* invaſion, all the cavalry which the nation could then furniſh amounted only to 3000: to account for this difference we muſt imagine, that the number of horſes which took the field in *Stephen*'s reign was no more than an undiſciplined rabble: The few that appeared under the banners of *Elizabeth*, a corps well formed, and ſuch as might be oppoſed to ſo formidable an enemy as was then expected; but ſuch is their preſent increaſe, that in the late war, the number employed was 13,575; and ſuch is our improvement in the breed of horſes, that moſt of thoſe which are uſed in our waggons and carriages * of different kinds, might be applied to the ſame purpoſe: of thoſe, our capital alone employs near 22,000.

The learned M. *de Buffon* has almoſt exhauſted the ſubject of the natural hiſtory of the horſe, and the other domeſtic animals; and left very little for after writers to add. We may obſerve, that this moſt noble and uſeful quadruped is endowed with every quality that can make it ſubſervient to the uſes of mankind; and thoſe qualities appear in a more exalted, or in a leſs degree, in proportion to our various neceſſities.

Undaunted courage, added to a docility half reaſoning, is given to ſome, which fits them for military ſervices. The ſpirit and emulation ſo apparent in others, furniſh us with that ſpecies, which is admirably adapted for the courſe; or, the more noble and generous pleaſure of the chace.

* It may alſo be obſerved, that the uſe of coaches was not introduced into *England* till the year 1564.

Patience and perſeverance appear ſtrongly in that moſt uſeful kind deſtined to bear the burdens we impoſe on them; or that employed in the ſlavery of the draught.

Though endowed with vaſt ſtrength, and great powers, they very rarely exert either to their maſters prejudice; but on the contrary, will endure fatigues, even to death, for our benefit. Providence has implanted in them a benevolent diſpoſition, and a fear of the human race, together with a certain conſciouſneſs of the ſervices we can render them. Moſt of the hoofed quadrupeds are domeſtic, becauſe neceſſity compels them to ſeek our protection: wild beaſts are provided with feet and claws, adapted to the forming dens and retreats from the inclemency of the weather; but the former deſtitute of theſe advantages, are obliged to run to us for artificial ſhelter, and harveſted proviſion; as nature, in theſe climates, does not throughout the year ſupply them with neceſſary food.

But ſtill, many of our tame animals muſt by accident endure the rigor of the ſeaſon: to prevent which inconvenience, their feet (for the extremities ſuffer firſt by cold) are protected by ſtrong hoofs of a horny ſubſtance.

The tail too is guarded with long buſhy hair that protects it in both extremes of weather; during the ſummer it ſerves by its pliancy and agility, to bruſh off the ſwarms of inſects, which are perpetually attempting either to ſting them, or to depoſit their eggs in the *rectum*; the ſame length of hair contributes to guard them from the cold in winter. But

we

we, by the abſurd and cruel cuſtom of docking, a practice peculiar to our country, deprive theſe animals of both advantages: in the laſt war our cavalry ſuffered ſo much on that account, that we now ſeem ſenſible of the error, and if we may judge from ſome recent orders in reſpect to that branch of the ſervice *, it will for the future be corrected.

Thus is the horſe provided againſt the two greateſt evils he is ſubject to from the ſeaſons: his natural diſeaſes are few; but our ill uſage, or neglect, or, which is very frequent, our over care of him, bring on a numerous train, which are often fatal. Among the diſtempers he is naturally ſubject to, are the worms, the bots, and the ſtone: the ſpecies of worms that infeſt him are the *lumbrici*, and *aſcarides*; both theſe reſemble thoſe found in human bodies, only larger: the bots are the *erucæ*, or caterpillars of the *oeſtrus*, or gad-fly: theſe are found both in the *rectum*, and in the ſtomach, and when in the latter bring on convulſions, that often terminate in death.

* The following remark of a noble writer on this ſubject is too ſenſible to be omitted:

'I muſt own I am not poſſeſſed with the *Engliſh* rage of cutting 'off all extremities from horſes. I venture to declare I ſhould be 'well pleaſed if their tails, at leſt a ſwitch or a nag tail, (but better 'if the whole) was left on. It is hardly credible what a difference, 'eſpecially at a certain ſeaſon of the year, this ſingle alteration 'would make in our cavalry, which though naturally ſuperior to 'all other I have ever ſeen, are however, long before the end of the 'campaign, for want of that natural defence againſt the flies, 'inferior to all: conſtantly ſweating and fretting at the picquet, 'tormented and ſtung off their meat and ſtomachs, miſerable and 'helpleſs; while the foreign cavalry bruſh off the vermin, are cool 'and at eaſe, and mend daily, inſtead of periſhing as ours do almoſt 'viſibly in the eye of the beholder.'

Method of breaking Horſes, &c. by *Henry* Earl of *Pembroke*, p. 68.

The ſtone is a diſeaſe the horſe is not frequently ſubject to; yet we have ſeen two examples of it, the one in a horſe near *High-wycombe*, that voided ſixteen *calculi*, each of an inch and a half diameter; the other was of a ſtone taken out of the bladder of a horſe, and depoſited in the cabinet of the late Dr. *Mead*; weighing eleven ounces *. Theſe ſtones are formed of ſeveral cruſts, each very ſmooth and gloſſy; their form triangular; but their edges rounded, as if by colliſion againſt each other.

The all-wiſe Creator hath finely limited the ſeveral ſervices of domeſtic animals towards the human race; and ordered that the parts of ſuch, which in their lives have been the moſt uſeful, ſhould after death contribute the leaſt to our benefit. The chief uſe that the *exuviæ* of the horſe can be applied to, is for collars, traces, and other parts of the harneſs; and thus, even after death, he preſerves ſome analogy with his former employ. The hair of the mane is of uſe in making wigs; of the tail in making the bottoms of chairs, floor-cloths, and cords; and to the angler in making lines.

* *Muſeum Meadianum*, p. 261.

Species II. The A S S.

Aſinus, *Raii ſyn. quad.* 63.
Geſn. quad. 5.
Klein. quad. 6.
De Buffon iv. 377.
Equus auriculis longis flaccidis, juba brevi. *Briſſon quad.* 70.
Equus aſinus. *Lin. ſyſt.* 100.
Eq. caudæ extremitate ſetoſa cruce nigra ſuper humeros. *Faun. Suec.* 35 *.
Br. Zool. 5.

NAMES.

Brit.	Aſyn, *fæm.* Aſen	*Germ.*	Eſel
Fren.	L'Ane, *f.* L'Aneſſe	*Dut.*	Eezel
Ital.	Aſino, Miccio. *f.* Miccia	*Swed.*	Aſna
Span.	Aſno, Borrico. *f.* Borrica	*Dan.*	Aſen, Eſel.
Port.	Aſno, Burro. *f.* Aſna, Burra		

THIS animal, tho' now ſo common in all parts of theſe iſlands, was entirely loſt among us during the reign of queen *Elizabeth*; *Hollingſhed* † informing us that in his time, "*our lande did yeelde no aſſes.*" But we are not to ſuppoſe ſo uſeful an animal was unknown in theſe kingdoms before that period; for mention is made of them ſo early as the time of king ‡ *Ethelred*, above four hundred years preceding; and again in the reign of ‖ *Henry* III. ſo that it muſt have been owing to ſome accident, that the race was extinct during the days of *Elizabeth*.

* *Habitat in magnatum prædiis rarius.* Faun. Suec. 35. *edit.* 1746. We imagine that ſince that time the ſpecies is there extinct, for *Linnæus* has quite omitted it in the laſt edition of the *Fauna Suecica.*

† 109.

‡ When the price of a mule or young aſs was 12s. *Chron. precioſum*, 51.

‖ In 1217 when the *Camerarius* of St. *Alban*'s loſt two aſſes, &c. *Chr. pr.* 60.

We

We are not certain of the time it was again introduced, probably in the ſucceeding reign, when our intercourſe with *Spain* was renewed; in which country this animal was greatly uſed, and where the ſpecies is in great perfection.

The aſs is originally a native of *Arabia*, and other parts of the *Eaſt*: a warm climate produces the largeſt and the beſt, their ſize and ſpirit declining in proportion as they advance into colder regions: the migration of theſe beaſts has been very ſlow; we ſee how recent their arrival is in *Great Britain*; in *Sweden* they are even at preſent a ſort of rarity, nor does it appear by the laſt hiſtory of *Norway* *, that they have yet reached that country. They are at preſent naturalized in this kingdom; our climate and ſoil ſeems to agree with them; the breed is ſpread thro' all parts; and their utility is more and more experienced.

They are now introduced into many ſervices that were before allotted to horſes; which will prove of the utmoſt uſe in ſaving thoſe noble animals for worthier purpoſes. Many of our richeſt mines are in ſituations almoſt inacceſſible to horſes; but where theſe ſure-footed creatures may be employed to advantage, in conveying our mineral treaſures to their reſpective marts; we may add too, that ſince our horſes are become a conſiderable article of commerce, and bring annually great ſums into theſe kingdoms; the cultivation of an animal that will in many caſes ſupply the place of the former, and enable us to enlarge our exports, certainly merits our attention.

* *Pontoppidan*'s Nat. Hiſtory of *Norway*.

The

The qualities of this animal are ſo well known, that we need not expatiate on them; its patience and perſeverance under labor, and its indifference in reſpect to food, need not be mentioned; any weed or thiſtle contents it: if it gives the preference to any vegetable, it is to the *Plantane*; for which we have often ſeen it neglect every other herb in the paſture. The narrow-leaved *Plantane* * is greedily eat by horſes and cows: Of late years it has been greatly cultivated and ſowed with clover in North *Wales*, particularly in *Angleſea*, where the ſeed is harveſted, and thence diſperſed thro' other parts of the principality.

The MULE.

Mulus, *Raii ſyn. quad.* 64.
Geſn. quad. 702.
Asinus biformis, *Klein quad.* 6.
Charlton ex. 4.
Equus auriculis longis erectis, juba brevi. *Briſſon quad.* 71.
Equus mulus, *Lin. ſyſt.* 101.
Faun. Suec. 35. edit. 1.
Br. Zool. 6.

NAMES.

Brit. Mul, *fæm.* Mules
Fren. Le Mulet
Ital. Mula
Span. Mulo
Port. Mula
Germ. Multhier, Muleſel
Dut. Muyl-Eeſel
Swed. Mulaſna
Dan. Muule, *v.* Muul-Eſel.

THIS uſeful and hardy animal is the off-ſpring of the horſe and aſs, or aſs and mare; thoſe produced between the two laſt are eſteemed the beſt, as the mule is obſerved to partake leſs of the male

* *Plantago maritima. Fl. Angl.* 52.

than

than the female parent; not but they almoſt always inherit in ſome degree the obſtinacy of the parent aſs, tho' it muſt be confeſſed that this vice is heightened by their being injudiciouſly broke; inſtead of mild uſage, which generally corrects the worſt qualities, the mule is treated with cruelty from the firſt; and is ſo habituated to blows, that it is never mounted or loaded without expectation of ill treatment; ſo that the unhappy animal either prepares to retaliate, or in the terror of bad uſage, becomes invincibly retrograde. Could we prevail on our countrymen to conſider this animal in the light its uſeful qualities merit, and pay due attention to its breaking, they might with ſucceſs form it for the ſaddle, the draught, or the burden. The ſize and ſtrength of our breed is at preſent ſo improved by the importation of the *Spaniſh* male aſſes, that we ſhall ſoon have numbers that may be adapted to each of thoſe uſes. Perſons of the firſt quality in *Spain* are drawn by them; for one of which (as Mr. *Clarke* informs us *) fifty or ſixty guineas is no uncommon price; nor is it ſurprizing, if we conſider how far they excel the horſe in draught, in a mountainous country; the mule being able to tread ſecurely where the former can hardly ſtand.

This brief account may be cloſed with the general obſervation, that neither mules nor the ſpurious offſpring of any other animal generate any farther; all theſe productions may be looked on as monſters; therefore nature, to preſerve the original ſpecies of

* Letters on the *Spaniſh* nation.

animals

animals entire and pure, wiſely ſtops in the firſt inſtance the powers of propagation.

Genus II. The O X.

Species I. The O X.

Raii ſyn. quad. 70.
Merret pinax. 166.
Geſn. quad. 25, 26, 92.
Taurus domeſticus. *Klein. quad.* 10.
Charlton ex. 8.

Bos cornibus levibus teretibus, ſurſum reflexis. *Briſſon quad.* 52.
Bos taurus. *Lin. ſyſt.* 98.
Bos cornibus teretibus flexis. *Faun. Suec.* 46.
Br. Zool. 7.

NAMES.

	Bull.	Cow.	Ox.	Calf.
Brit.	Tarw	Buwch	Ych, Eidion	Llo
Fren.	Le Taureau	La Vache	Le Bœuf	Veau
Ital.	Toro	Vacca	Bue	Vitello
Span.	Toro	Vaca	Buey	Ternera
Port.	Touro	Vaca	Boy	Vitela
Germ.	Stier	Kue	Ochs	Kalb
Dut.	Stier, Bul	Koe	Os	Kalff
Swed.	Tiur	Ko	Noot	Kalff
Dan.	Tyr	Koe	Oxe, Stud	Kalv

THE climate of *Great-Britain* is above all others productive of the greateſt variety and abundance of wholeſome vegetables, which, to crown our happineſs, are almoſt equally diffuſed thro' all its parts; this general fertility is owing to thoſe clouded ſkies, which foreigners miſtakenly urge as a reproach on our country; but let us chearfully endure a temporary gloom, which cloaths not only our meadows but our hills with the richeſt verdure. To this we owe the number, variety, and excellence of our cattle, the richneſs of our dairies, and innumerable other advan-

advantages. *Cæsar* (the earlieſt writer who deſcribes this iſland of *Great-Britain*) ſpeaks of the numbers of our cattle, and adds that we neglected tillage, but lived on milk and fleſh *. *Strabo* takes notice of our plenty of milk, but ſays we were ignorant of the art of making cheeſe †. *Mela* informs us, that the wealth of the *Britains* conſiſted in cattle: and in his account of *Ireland* reports that ſuch was the richneſs of the paſtures in that kingdom, that the cattle would even burſt if they were ſuffered to feed in them long at a time ‡.

This preference of paſturage to tillage was delivered down from our *Britiſh* anceſtors to much later times; and continued equally prevalent during the whole period of our feodal government: the chieftain, whoſe power and ſafety depended on the promptneſs of his vaſſals to execute his commands, found it his intereſt to encourage thoſe employments that favoured that diſpoſition; the vaſſal, who made it his glory to fly at the firſt call to the ſtandard of his chieftain, was ſure to prefer that employ, which might be tranſacted by his family with equal ſucceſs during his abſence. Tillage would require an attendance incompatible with the ſervices he owed the baron, while the former occupation not only gave leiſure for thoſe duties, but furniſhed the hoſpitable board of his lord with ample proviſion, of which the vaſſal was equal partaker. The reliques of the larder of the elder *Spencer* are evident proofs of the plenty

* *Lib.* 5. † *Lib.* 4.

‡ Adeo luxurioſa herbis non lætis modo ſed etiam dulcibus, ut ſe exigua parte diei pecora impleant, ut niſi pabulo prohibeantur, diutius paſta diffiliant. Lib. iii. c. 6.

of

of cattle in his days; for after his winter proviſions may have been ſuppoſed to have been moſtly conſumed, there were found, ſo late as the month of *May* in ſalt, the carcaſes of not fewer than 80 beeves, 600 bacons, and 600 muttons *. The accounts of the ſeveral great feaſts in after times, afford amazing inſtances of the quantity of cattle that were conſumed in them. This was owing partly to the continued attachment of the people to grazing †; partly to the preference, that the *Engliſh* at all times gave to animal food. The quantity of cattle that appear from the lateſt calculation to have been conſumed in our metropolis, is a ſufficient argument of the vaſt plenty of theſe times; particularly when we conſider the great advancement of tillage, and the numberleſs variety of proviſions, unknown to paſt ages, that are now introduced into theſe kingdoms from all parts of the world ‡.

Our breed of horned cattle has in general been ſo much improved by a foreign mixture, that it is difficult to point out the original kind of theſe iſlands. Thoſe which may be ſuppoſed to have been purely *Britiſh* are far inferior in ſize to thoſe on the northern part of the *European* continent: the cattle of the high-

* *Hume*'s hiſtory of *England* ii. 153.

† *Polyd. Virgil Hiſt. Angl.* vol. i. 5. who wrote in the time of *Henry* the 8th ſays *Angli plures pecuarii quam aratores.*

‡ That inquiſitive and accurate hiſtorian *Maitland* furniſhes us with this table of the quantity of cattle that were conſumed in *London* above 30 years ago, when that city was far leſs populous than it is at preſent.

Beeves	98,244.	Pigs	52,000.
Calves	194,760.	Sheep and Lambs	711,123.
Hogs	186,932.		

lands of *Scotland* are exceeding ſmall, and many of them, males as well as females, are hornleſs: the *Welſh* runts are much larger: the black cattle of *Cornwall* are of the ſame ſize with the laſt. The large ſpecies that is now cultivated through moſt parts of *Great-Britain* are either entirely of foreign extraction, or our own improved by a croſs with the foreign kind. The *Lincolnſhire* kind derive their ſize from the *Holſtein* breed; and the large hornleſs cattle that are bred in ſome parts of *England* come originally from *Poland*.

As to the wild cattle of *Scotland*, which *Jonſton* mentions under the name of *Biſon Scoticus*, and deſcribes as having the mane of a lion, and being entirely white *, the ſpecies is now extinct; nor is there to be found at preſent in any part of theſe kingdoms a wild breed of any ſort, analogous to the domeſtic kinds.

Frequent mention is made of our ſavage cattle by hiſtorians. One relates, that *Robert Bruce*, king of *Scotland*, in chacing theſe animals, was preſerved from the furious attacks of a wild bull by the intrepidity of one of his courtiers, from which he and his lineage acquired the name of *Turnbull*. *Fitz-Stephens* † names theſe animals among thoſe that harbored in the great foreſt that in his days lay adjacent to *London*. Another enumerates among the proviſions at the great feaſt ‡ of *Nevil*, archbiſhop of *York*, ſix wild bulls.

* *Jonſton. Nat. Hiſt.* i. 37.

† *Fitz-Stephens* was a monk, who lived in the time of *Henry* II. and wrote a hiſtory of *London*; a tranſlation of it may be ſeen in one of the Annual Regiſters.

‡ *Leland's collect.*

And

And *Sibbald* aſſures us, that even in his time wild white cattle were found in the mountains of *Scotland**. Theſe were the origin of the tame cattle in our iſlands: the *Urus* or *Aurochs*, the animal in its ſtate of nature, no longer exiſts in any part of *Europe*, except it remains ſtill in *Poland*, of which we have accounts in *Rzackzynki*'s natural hiſtory of that kingdom †.

The ox is the only horned animal in theſe iſlands that will apply his ſtrength to the ſervice of mankind. It is now generally allowed, that in many caſes oxen are more profitable in the draught than horſes; their food, harneſs, and ſhoes being cheaper, and ſhould they be lamed or grow old, an old working beaſt will be as good meat, and fatten as well as a young one ‡.

There is ſcarce any part of this animal without its uſe. The blood, fat, marrow, hide, hair, horns, hoofs, milk, creme, butter, cheeſe, whey, urine, liver, gall, ſpleen, bones, and dung, have each their particular uſe in manufactures, commerce and medicine.

The ſkin has been of great uſe in all ages. The antient *Britains*, before they knew a better method, built their boats with oſiers and covered them with the hides of bulls, which ſerved for ſhort ‖ coaſting voyages.

* *Sib. Hiſt. Scot.* iii. 7. † P. 228.

‡ *Mortimer's Huſbandry*, i. 171.

‖ That theſe *vitilia navigia*, as *Pliny* calls them, were not made for long voyages, is evident not only from their ſtructure, but from the account given by *Solinus*, that the crew never eat during the time they were at Sea. *Vide C. Junii Solini polyhiſtor.* 56.

Primum cana ſalix madefacto vimine parvam
Texitur in Puppim, cæſoque induta juvenco,
Vectoris patiens, tumidum ſuper emicat amnem:
Sic *Venetus* ſtagnante *Pado*, fuſoque *Britannus*
Navigat oceano. *Lucan.* lib. iv. 131.

Veſſels of this kind are ſtill in uſe on the *Iriſh* lakes; and on the *Dee* and *Severn*: in *Ireland* they are called *Curach*, in *England Coracles*, from the *Britiſh Cwrwgl*, a word ſignifying a boat of that ſtructure.

At preſent, the hide, when tanned and curried, ſerves for boots, ſhoes, and numberleſs other conveniences of life.

Vellum is made of calves ſkin, and goldbeaters ſkin is made of a thin vellum, or the finer part of the ox's guts. The hair mixed with lime is a neceſſary article in building. Of the horns are made combs, boxes, handles for knives, and drinking veſſels; and when ſoftened by water, obeying the manufacturer's hand, they are formed into pellucid laminæ for the ſides of lanthorns. Theſe laſt conveniences we owe to our great king *Alfred*, who firſt invented them to preſerve his candle, time meaſurers, from the wind *; or (as other writers will have it) the tapers that were ſet up before the reliques in the miſerable tattered churches of that time †.

In medicine, the horns were employed as alexipharmics or antidotes againſt poiſon, the plague, or the ſmall-pox; they have been dignified with the title of *Engliſh bezoar*; and are ſaid to have been

* *Anderſon's hiſt. commerce*, i. 45.
† *Lavely's hiſt. of churches*, 103.

found

found to anſwer the end of the oriental kind: the chips of the hoofs, and parings of the raw hides, ſerve to make carpenters glue.

The bones are uſed by mechanics, where ivory is too expenſive; by which the common people are ſerved with many neat conveniencies at an eaſy rate. From the *tibia* and *carpus* bones is procured an oil much uſed by coach-makers and others in dreſſing and cleaning harneſs, and all trappings belonging to a coach; and the bones calcined, afford a fit matter for teſts for the uſe of the refiner in the ſmelting trade.

The blood is uſed as an excellent manure for fruit trees*. And is the baſis of that fine color, the *Pruſſian* blue.

The fat, tallow, and ſuet, furniſh us with light; and are alſo uſed to præcipitate the ſalt that is drawn from briny ſprings. The gall, liver, ſpleen and urine, have alſo their place in the *materia medica*.

The uſes of butter, cheeſe, creme and milk, in domeſtic œconomy; and the excellence of the latter, in furniſhing a palatable nutriment for moſt people, whoſe organs of digeſtion are weakened, are too obvious to be inſiſted on.

* *Evelyn*'s phil. diſc. of earth, p. 319.

Genus III. The SHEEP.

Species I. The SHEEP.

Ovis, *Raii syn. quad.* 73.
Gesn. quad. 71.
Ovis aries, ovis anglica mutica cauda scrotoque ad genua pendulis. *Lin. syst.* 97.
Ovis cornibus compressis lunatis. *Faun. Suec.* 45.
Aries, &c. *Klein. quad.*
Aries laniger cauda rotunda brevi. *Brisson quad.* 48.
De Buffon. v. 1. *tab.* 1, 2.
Br. Zool. 10.

NAMES.

	Male.	Female.	Lamb.
Brit.	Hwrd, Maharen	Dafad	Oen
Fren.	Le Belier	La Brebis	L'Agneau
Ital.	Montone	Pecora	Agnello
Span.	Carnero	Oveja	Cordero
Port.	Caneiro	Ovelha	Cordeiro
Germ.	Wider	Schaff	Lamb
Dut.	Ram	Schaep	Lam
Swed.	Wadur	Faar	Lamb
Dan.	Vædder, Være	Faar	Lam, *agna* Gimmer Lam.

IT does not appear from any of the early writers, that the breed of this animal was cultivated among the *Britains*; the inhabitants of the inland parts of this island either went entirely naked, or were only clothed with skins. Those who lived on the sea coasts, and were the most civilized, affected the manners of the *Gauls*, and wore like them a sort of garments made of coarse wool, called *Brachæ*. These they probably had from *Gaul*, there not being the least traces of manufactures among the *Britains*, in the histories of those times.

This

This negligence may be eaſily accounted for, in an uncivilized nation whoſe wants were few, and thoſe eaſily ſatisfied; but what is more ſurpriſing, when after a long period we had cultivated a breed of ſheep, whoſe fleeces were ſuperior to thoſe of other countries; we ſtill neglected to promote a woollen manufacture at home. That valuable branch of buſineſs lay for a conſiderable time in foreign hands; and we were obliged to import the cloth manufactured from our own materials. There ſeems indeed to have been many unavailing efforts made by our monarchs to preſerve both the wool and the manufacture of it among ourſelves: *Henry* the ſecond, by a patent granted to the weavers in *London*, directed that if any cloth was found made of a mixture of *Spaniſh* wool, it ſhould be burnt by the mayor*: yet ſo little did the weaving buſineſs advance, that *Edward* the third was obliged to permit the importation of foreign cloth in the beginning of his reign; but ſoon after, by encouraging foreign artificers to ſettle in *England*, and inſtruct the natives in their trade, the manufacture increaſed ſo greatly as to enable him to prohibit the wear of foreign cloth. Yet, to ſhew the uncommercial genius of the people, the effects of this prohibition were checked by another law, as prejudicial to trade as the former was ſalutary; this was an act of the ſame reign, againſt exporting woollen goods manufactured at home, under heavy penalties; while the exportation of wool was not only allowed but encouraged. This

* *Stow* 419.

overſight was not ſoon rectified, for it appears that, on the alliance that *Edward* the fourth made with the king of *Arragon*, he preſented the latter with ſome ewes and rams of the *Coteſwold* kind; which is a proof of their excellency, ſince they were thought acceptable to a monarch, whoſe dominions were ſo noted for the fineneſs of their fleeces *.

In the firſt year of *Richard* the third, and in the two ſucceeding reigns, our woollen manufactures received ſome improvements †; but the grand riſe of all its proſperity is to be dated from the reign of queen *Elizabeth*, when the tyranny of the duke of *Alva* in the *Netherlands* drove numbers of artificers for refuge into this country, who were the founders of that immenſe manufacture we carry on at preſent. We have ſtrong inducements to be more particular on the modern ſtate of our woollen manufactures; but we deſiſt, from a fear of digreſſing too far; our enquiries muſt be limited to points that have a more immediate reference to the ſtudy of *Zoology*.

No country is better ſupplied with materials, and thoſe adapted to every ſpecies of the clothing buſineſs, than *Great-Britain*; and though the ſheep of theſe iſlands afford fleeces of different degrees of goodneſs, yet there are not any but what may be uſed in ſome branch of it. *Herefordſhire*, *Devonſhire*, and *Coteſwold downs* are noted for producing ſheep with

* *Rapin* i. 605. in the note. *Stow's Annales*, 696.

† In that of *Richard*, two-yard cloths were firſt made. In that of *Henry* the 8th, an *Italian* taught us the uſe of the diſtaff. Kerſies were alſo firſt made in *England* about that time.

remarkably

remarkably fine fleeces; the *Lincolnſhire* and *Warwickſhire* kind, which are very large, exceed any for the quantity and goodneſs of their wool. The former county yields the largeſt ſheep in theſe iſlands, where it is no uncommon thing to give fifty guineas for a ram, and a guinea for the admiſſion of a ewe to one of the valuable males; or twenty guineas for the uſe of it for a certain number of ewes during one ſeaſon. *Suffolk* alſo breeds a very valuable kind. The fleeces of the northern parts of this kingdom are inferior in fineneſs to thoſe of the ſouth; but ſtill are of great value in different branches of our manufactures. The *Yorkſhire* hills furniſh the looms of that county with large quantities of wool; and that which is taken from the neck and ſhoulders, is uſed (mixed with *Spaniſh* wool) in ſome of their fineſt cloths.

Wales yields but a coarſe wool; yet is of more extenſive uſe than the fineſt *Segovian* fleeces; for rich and poor, age and youth, health and infirmities, all confeſs the univerſal benefit of the flannel manufacture.

The ſheep of *Ireland* vary like thoſe of *Great-Britain*. Thoſe of the ſouth and eaſt being large, and their fleſh rank. Thoſe of the north, and the mountainous parts ſmall, and their fleſh ſweet. The fleeces in the ſame manner differ in degrees of value.

Scotland breeds a ſmall kind, and their fleeces are coarſe. *Sibbald* (after *Boethius*) ſpeaks of a breed in the iſle of *Rona*, covered with blue wool; of another kind in the iſle of *Hirta*, larger than the biggeſt he goat, with tails hanging almoſt to the ground, and

and horns as thick, and longer than thoſe of an ox*. He mentions another kind, which are clothed with a mixture of wool and hair; and of a fourth ſpecies, whoſe fleſh and fleeces are yellow, and their teeth of the colour of gold; but the truth of theſe relations ought to be enquired into, as no other writer has mentioned them, except the credulous *Boethius*.

Beſides the fleece, there is ſcarce any part of this animal but what is uſeful to mankind; the fleſh is a delicate and wholeſome food; the ſkin dreſſed, forms different parts of our apparel; and is uſed for covers of books. The entrails, properly prepared and twiſted, ſerve for ſtrings for various muſical inſtruments. The bones calcined (like other bones in general) form materials for teſts for the refiner. The milk is thicker than that of cows; and conſequently yields a greater quantity of butter and cheeſe; and in ſome places is ſo rich, that it will not produce the cheeſe without a mixture of water to make it part from the whey. The dung is a remarkable rich manure; inſomuch that the folding of ſheep is become too uſeful a branch of huſbandry

* *Gmelin* deſcribes an animal he found in *Siberia*, that in many particulars agrees with this; he calls it *Rupicapra cornubus arietinis*; *Linnæus* ſtyles it *Capra ammon. Syſt.* 97. and *Geſner*, p. 934. imagines it to be the *Muſimon* of the antients; the horns of the *Siberian* animal are two yards long, their weight above thirty pounds. As we have ſuch good authority for the exiſtence of ſuch a quadruped, we may venture to give credit to *Boethius*'s account, that the ſame kind was once found in *Hirta*. M. *de Buffon*, tom. xi. p. 352. deſcribes it under the name of *Le Mouflon*, and with great appearance of reaſon imagines it to be the ſheep in its wild ſtate. In the ſecond plate of this edition is given the figure of the horns of this animal, from the *Petrop. Tranſactions*.

for the farmer to neglect. To conclude, whether we conſider the advantages that reſult from this animal to individuals in particular, or to theſe kingdoms in general, we may with *Columella* conſider this in one ſenſe, as the firſt of the domeſtic animals. *Poſt majores quadrupedes ovilli pecoris ſecunda ratio eſt; quæ prima ſit ſi ad utilitatis magnitudinem referas. Nam id præcipue contra frigoris violentiam protegit, corporibuſque noſtris liberaliora præbet velamina; et etiam elegantium menſas jucundis et numeroſis dapibus exornat* *.

The ſheep, as to its nature, is a moſt innocent, mild and ſimple animal; and conſcious of its own defenceleſs ſtate, remarkably timid: if attacked when attended by its lamb, it will make ſome ſhew of defence, by ſtamping with its feet and puſhing with its head; it is a gregarious animal, is fond of any jingling noiſe, for which reaſon the leader of the flock has in many places a bell hung round its neck, which the others will conſtantly follow; it is ſubject to many diſeaſes: ſome ariſe from inſects which depoſite their eggs in different parts of the animal; others are cauſed by their being kept in wet paſtures; for as the ſheep requires but little drink, it is naturally fond of a dry ſoil. The dropſy, vertigo (the *pendro* of the Welſh) the pthiſick, jaundice, and worms in the liver † annually make great havoke among our flocks: for the firſt diſeaſe, the ſhepherd finds a remedy by turning the infected into fields of broom; which plant has been alſo found to

* *De re ruſtica, lib.* vii. *c.* 2.
† Faſciola hepatica, *Lin. ſyſt.* 648.

be

be very efficacious in the ſame diſorder among the human ſpecies.

The ſheep is alſo infeſted by different ſorts of inſects; like the horſe it has its peculiar *Oeſtrus* or *Gadfly*, which depoſits its eggs above the noſe in the frontal ſinuſes; when thoſe turn into maggots they become exceſſive painful, and cauſe thoſe violent agitations that we ſo often ſee the animal in. The *French* ſhepherds make a common practice of eaſing the ſheep, by trepanning and taking out the maggot; this practice is ſometimes uſed by the *Engliſh* ſhepherds, but not always with the ſame ſucceſs: beſides theſe inſects, the ſheep is troubled with a kind of tick and louſe, which magpies and ſtarlings contribute to eaſe it of, by lighting on its back, and picking the inſects off.

T

Genus

Genus IV. The GOAT.

Species I. The GOAT.

Raii ſyn. quad. 77.
Meyer's an. i. *Tab.* 68.
Charlton ex. 9.
Klein quad. 15.
Geſn. quad. 266. 268.
De Buffon. v. 59. *Tab.* 8. 9.

Hircus cornibus interius cultratis, exterius rotundatis, infra carinatis, arcuatis. *Briſſon quad.* 38.
Capra Hircus, *Lin. ſyſt.* 94.
Capra cornibus carinatis arcuatis, *Faun. Suec.* 44.
Br. Zool. 13.

NAMES.

	Male.	Female.	Kid.
Brit.	Bwch	Gafr	Mynn
Fren.	Le Bouc	La Chevre	Chevreau
Ital.	Beeco	Capra	Capretto
Span.	Cabron	Cabra	Cabrito
Port.	Cabram	Cabra	Cabrito
Germ.	Bock	Geiſz	Bocklin
Dut.	Bok	Giyt	
Swed.	Bock	Geet	Kiidh
Dan.	Buk, Geedebuk	Geed	Kid

THE goat is the moſt local of any of our domeſtic animals, confining itſelf to the mountainous parts of theſe iſlands: his moſt beloved food is the tops of the boughs, or the tender bark of young trees; on which account he is ſo prejudicial to plantations, that it would be imprudent to draw him from his native rocks, except ſome method could be thought on to obviate this evil. We have been informed, that there is a freeholder in the pariſh of *Trawſvynnyd*, in *Merionethſhire*, who hath, for ſeveral years paſt, broke the teeth of his goats ſhort off with a pair of pincers, to preſerve his trees.

This practice has certainly efficacy ſufficient to prevent the miſchief, and may be recommended to thoſe who keep them for their ſingularity; but ought by no means to be encouraged, when thoſe animals are preſerved for the ſake of their milk, as the great ſalubrity of that medicine ariſes from their promiſcuous feeding.

This quadruped contributes in various inſtances to the neceſſities of human life; as food, as phyſick, and as cloathing; the whiteſt wigs are made of its hair; for which purpoſe that of the he-goat is moſt in requeſt; the whiteſt and cleareſt is ſelected from that which grows on the haunches, where it is longeſt and thickeſt; a good ſkin well haired is ſold for a guinea; though a ſkin of bad hue, and ſo yellow as to baffle the barber's ſkill to bleach, will not fetch above eighteen-pence, or two ſhillings.

The *Welch* goats are far ſuperior in ſize, and in length and fineneſs of hair, to thoſe of other mountainous countries. Their uſual color is white: thoſe of *France* and the *Alps* are ſhort-haired, reddiſh, and their horns ſmall. We have ſeen the horns of a *Cambrian* he-goat three feet two inches long, and three feet from tip to tip.

The ſuet of the goat is in great eſteem, as well as the hair. Many of the inhabitants of *Caernarvonſhire* ſuffer theſe animals to run wild on the rocks during winter as well as ſummer, and kill them in *October*, for the ſake of their fat, either by ſhooting them with bullets, or running them down with dogs like deer. The goats killed for this purpoſe, are about four or five years old. Their ſuet will

will make candles, far ſuperior in whiteneſs and goodneſs to thoſe made from that of the ſheep or the ox, and accordingly brings a much greater price in the market: nor are the horns without their uſe, the country people making of them excellent handles for tucks and penknives. The ſkin is peculiarly well adapted for the glove manufactory, eſpecially that of the kid: abroad it is dreſſed and made into ſtockings, bed-ticks, bolſters, * bed-hangings, ſheets, and even ſhirts. In the army it covers the horſeman's arms, and carries the foot ſoldiers proviſions. As it takes a dye better than any other ſkin; it was formerly much uſed for hangings in the houſes of people of fortune; being ſuſceptible of the richeſt colors, and when flowered and ornamented with gold and ſilver, became an elegant and ſuperb furniture.

The fleſh is of great uſe to the inhabitants of the country where it reſides; and affords them a cheap and plentiful proviſion in the winter months, when the kids are brought to market. The haunches of the goat are frequently ſalted and dried, and ſupply all the uſes of bacon: this by the natives is called *Coch yr wden*, or hung veniſon.

The meat of a ſplayed goat of ſix or ſeven years old, (which is called *Hyfr*) is reckoned the beſt; being generally very ſweet and fat. This makes an excellent paſty; goes under the name of rock veniſon, and is little inferior to that of the deer. Thus nature

* Bolſters made of the hair of a goat were in uſe in the days of *Saul*; as appears from I. *Samuel*, c. 19. v. 13. The ſpecies very probably was that now called the *angora* goat, which is only found in the *Eaſt*, and whoſe ſoft and ſilky hair ſupplied a moſt luxurious couch.

provides

provides even on the tops of high and craggy mountains, not only neceſſaries, but delicacies for the inhabitants.

The milk of the goat is ſweet, nouriſhing and medicinal; it is an excellent ſuccedaneum for aſs's milk; and has (with a tea-ſpoonful of hartſhorn drank warm in bed in the morning, and at four o'clock in the afternoon, and repeated for ſome time) been a cure for phtiſical people, before they were gone too far. In ſome of the mountainous parts of *Scotland* and *Ireland*, the milk is made into whey; which has done wonders in this and other caſes, where coolers and reſtoratives are neceſſary: and to many of thoſe places, there is a great reſort of patients of all ranks, as there is in *England* to the *Spaws* or *Baths*. It is not ſurprizing that the milk of this animal is ſo ſalutary, as it brouzes only on the tops, tendrils and flowers of the mountain ſhrubs, and medicinal herbs; rejecting the groſſer parts. The blood of the he-goat dried, is a great recipe in ſome families for the pleuriſy and inflammatory diſorders *.

Cheeſe made of goats milk, is much valued in ſome of our mountainous countries, when kept to proper age; but has a peculiar taſte and flavour.

The rutting ſeaſon of theſe animals, is from the beginning of *September* to *November*; at that time the males drive whole flocks of the females continually from place to place, and fill the whole atmoſphere around them with their ſtrong and ungrateful

* This remedy is taken notice of even by Dr. *Mead* in his *monita medica*, p. 35. under the article *pleuritis*. The *Germans* uſe that of the *Shin-bock* or *Ibex*.

odor;

odor; which though as diſagreeable as aſa fætida itſelf, yet may be conducive to prevent many diſtempers, and to cure nervous and hyſterical ones. Horſes are imagined to be much refreſhed with it, on which account many perſons keep a he-goat in their ſtuds or ſtables.

Goats go with young four months and a half, and bring forth from the latter end of *February* to the latter end of *April*: Having only two teats, they bear generally but two young, and ſometimes three; and in good warm paſtures there have been inſtances, though rare, of their bringing four at a time: both young and old are affected by the weather: a rainy ſeaſon makes them thin; a dry ſunny one makes them fat and blythe: their exceſſive venery prevents longævity, for they ſeldom live above eleven or twelve years.

Theſe animals with amazing ſwiftneſs and ſafety, climb up the moſt rugged rocks, and aſcend the moſt dangerous places: They can ſtand unmoved on the higheſt precipices, and ſo balance their center of gravity, as to fix themſelves in ſuch ſituations with ſecurity and firmneſs; ſo that we ſeldom hear of their falling, or breaking their necks. When two are yoked together, as is frequently practiſed; they will, as if by conſent, take large and hazardous leaps; yet ſo well time their mutual efforts, as rarely to miſcarry in the attempt.

Genus V. The STAG.

Species I. The STAG, or RED DEER.

Red Deer, Stag or Hart. *Raii syn. quad.* 84. *Charlt. ex.* 11. *Meyer's an.* Tab. 22. *Gesner quad.* 326. *Grew's Museum*, 21. *De Buffon*, Tom. vi. 63. Tab. 9, 10. Cervus Cervus cornibus teretibus ad latera incurvis. *Brisson. quad.* 58. Cervus Elaphus. *Lin. syst.* 93. C. cornibus ramosis teretibus recurvatis. *Faun Suec.* 40. C. nobilis. *Klein. quad.* 23. *Br. Zool.* 15.

NAMES.

	STAG.	HIND.	YOUNG, or CALF.
Brit.	Carw	Ewig	Elain
Fren.	Le Cerf	La Biche	Faon
Ital.	Cervio	Cervia	
Span.	Ciervo	Cierva	
Port.	Cervo	Cerva	
Germ.	Hirtz, Hirsch	Hint	Hinde kalb
Dutch,	Hart	Hinde	
Swed.	Hiort, Kronhiort	Hind	
Dan.	Kronhiort	Hind	Kid, or Hind kalv

Species II. The BUCK.

Fallow deer, or buck; cervus platyceros. *Raii. syn. quad.* 85. Dama vulgaris. *Gesner quad.* 307. *Meyer's an.* Tom. i. Tab. 71. *De Buffon.* Tom. vi. 161. Tab. 27, 28. Cervus cornuum unica et altiore summitate palmata. *Brisson quad.* 62. Cervus dama. Cervus cornibus ramosis recurvatis compressis; summitatibus palmatis. *Lin. syst.* 93. *Faun. Suec.* 42. *Br. Zool.* 15. Cervus palmatus. *Klein. quad.* 25.

NAMES.

	BUCK.	DOE.	FAWN.
Brit.	Hydd	Hyddes	Elain
Fren.	Le Dain	La Daine	Faon
Ital.	Daino		Cerbiatto
Span.	Gamo, corza		Venadito
Port.	Corza		Veado
Germ.	Damhirsch		
Swed.	Dof, Dof hiort		
Dan.	Daae Dijr		

AT first, the beasts of chace had this whole island for their range; they knew no other limits than that

that of the ocean; nor confeſſed any particular maſter. When the *Saxons* had eſtabliſhed themſelves in the *Heptarchy*, they were reſerved by each ſovereign for his own particular diverſion: hunting and war in thoſe uncivilized ages were the only employ of the great; their active, but uncultivated minds, being ſuſceptible of no pleaſures but thoſe of a violent kind, ſuch as gave exerciſe to their bodies, and prevented the pain of thinking.

But as the *Saxon* kings only appropriated thoſe lands to the uſe of foreſts which were unoccupied; ſo no individuals received any injury; but when the conqueſt had ſettled the *Norman* line on the throne, this paſſion for the chace was carried to an exceſs, which involved every civil right in a general ruin; it ſuperſeded the conſideration of religion even in a ſuperſtitious age: the village communities, nay, even the moſt ſacred ædifices were turned into one vaſt waſte, to make room for animals: the objects of a lawleſs tyrant's pleaſure. The new foreſt in *Hampſhire* is too trite an inſtance to be dwelt on: ſanguinary laws were enacted to preſerve the game; and in the reigns of *William Rufus*, and *Henry* the firſt, it was leſs criminal to deſtroy one of the human ſpecies than a beaſt of chace *. Thus it continued while the *Norman* line filled the throne; but when the *Saxon* line was reſtored under *Henry* the ſecond, the rigor of the foreſt laws was immediately ſoftened.

When our *Barons* began to form a power, they

* An ancient hiſtorian ſpeaks thus of the penalties incurred; *Si cervum caperent aut aprum oculos eis evellebat; amavit enim feras tanquam erat pater earum.*

claimed a vaſt, but more limited tract for a diverſion that the *Engliſh* were always fond of: They were very jealous of any encroachments on their reſpective bounds, which were often the cauſe of deadly feuds; ſuch a one gave cauſe to the fatal day of *Chevy-chace*, a fact, though recorded only in a ballad, may, from what we know of the manners of the times, be founded on truth; not that it was attended with all the circumſtances the author of that natural, but heroic compoſition hath given it, for on that day neither a *Percy* nor a *Douglas* fell: here the poet ſeems to have claimed his privilege, and mixed with this fray ſome of the events of the battle of *Otterbourne*.

When property became happily more divided by the relaxation of the feodal tenures, theſe extenſive hunting-grounds became more limited; and as tillage and huſbandry increaſed, the beaſts of chace were obliged to give way to others more uſeful to the community. Thoſe vaſt tracts of land, before dedicated to hunting, were then contracted; and in proportion as the uſeful arts gained ground, either loſt their original deſtination, or gave riſe to the invention of *Parks*. Liberty and the arts ſeem coeval, for when once the latter got footing, the former protected the labors of the induſtrious from being ruined by the licentiouſneſs of the ſportſman, or being devoured by the objects of his diverſion: for this reaſon, the ſubjects of a deſpotic government ſtill experience the inconveniences of vaſt waſtes, and foreſts, the terrors of the neighbouring huſbandmen *; while in our well-

* In *Germany* the peaſants are often obliged to watch their grounds the whole night, to preſerve the fences and corn from being deſtroyed by the deer.

regulated monarchy, very few chaces remain: we ſtill indulge ourſelves in the generous pleaſure of hunting, but confine the deer-kind to Parks, of which *England* boaſts of more than any other kingdom in *Europe*. Our equal laws allow every man his pleaſure; but confine them in ſuch bounds, as prevent them from being injurious to the meaneſt of the community. Before the reformation, our prelates ſeem to have guarded ſufficiently againſt the want of this amuſement, the ſee of *Norwich* in particular, being poſſeſſed about that time of thirteen parks *. They ſeem to have forgot good king *Edgar*'s advice, *Docemus etiam ut ſacerdos non ſit venator neque accipitrarius neque potator, ſed incumbat ſuis libris ſicut ordinem ipſius decet* †.

The ſtag and buck agree in their nature; which is ſo univerſally known as to render any account of it unneceſſary: the firſt is become leſs common than it was formerly; its exceſſive vitiouſneſs during the rutting ſeaſon, and the badneſs of its fleſh, induce moſt people to part with the ſpecies. Stags are ſtill found wild in the highlands of *Scotland*, but are ſmaller than thoſe of *England*. They are likewiſe met with on the moors that border on *Cornwal* and *Devonſhire*, and in *Ireland* on the mountains of *Kerry*, where they add greatly to the magnificence of the romantic ſcenery of the lake of *Killarny*.

We have in *England* two varieties of fallow-deer which are ſaid to be of foreign origin: The beautiful ſpotted kind, ſuppoſed to have been brought from *Bengal*; and the very deep brown ſort, that are

* *Peacham's Compleat Gentleman*, 261. † *Leges Saxon.* 87.

now ſo common in ſeveral parts of this kingdom. Theſe were introduced here by king *James* the *firſt* out of *Norway* *, where he paſſed ſome time when he viſited his intended bride *Mary* of *Denmark* †. He obſerved their hardineſs; and that they could endure, even in that ſevere climate, the winter without fodder. He firſt brought ſome into *Scotland*, and from thence tranſported them into his chaces of *Enfield* and *Epping*, to be near his palace of *Theobalds*; for it is well known, that monarch was in one part of his character the *Nimrod* of his days, fond to exceſs of hunting, that image of war, although he deteſted the reality.

The uſes of theſe animals are almoſt ſimilar; the ſkin of the buck and doe is ſufficiently known to every one; and the horns of the ſtag are of great uſe in mechanics; they, as well as the horns of the reſt of the deer kind, being exceſſively compact, ſolid, hard and weighty; and make excellent handles for couteaus, knives, and ſeveral other utenſils. They abound in that ſalt, which is the baſis of the ſpirit of *Hartſhorn*; and the remains (after the ſalts are extracted) being calcined, become a valuable aſtringent in fluxes, which is known by the name of burnt *Hartſhorn*: Beſides theſe uſes in mechanics and medicine, there is an inſtance in *Giraldus Cambrenſis*, of a counteſs of *Cheſter*, who kept milch hindes, and made cheeſe, of their milk ſome of which ſhe preſented to archbiſhop *Baldwin*, in his itinerary through *Wales*, in the year 1188 ‡.

* This we relate on the authority of Mr. *Peter Collinſon*.

† One of the *Welch* names of this animal (*Geivr-danas*, or *Daniſh* goat) implies that it was brought from ſome of the *Daniſh* dominions. *Ed. Lhwyd. Ph. tr.* No. 334. ‡ *Girald. Camb. Itin.* p. 216.

Species

Species III. The ROEBUCK.

Caprea Plinii,
Capreolus Vulgo. *Raii syn. quad.* 89.
Camd. Brit. ii. 771.
Meyer's anim. ii. Tab. 73.
Capreolus, *Sib. Scot. pars* 3. 9.
Caprea capreolus. Dorcas. *Gesner. quad.* 296.
Merret pinax. 166.
Cervus cornibus teretibus erectis. *Brisson quad.* 61.
De Buffon, Tom. vi. 289. Tab. 32, 33.
Cervus minimus, *Klein quad.* 24.
Cervus capreolus, *Lin. syst.* 94.
C. Cornibus ramosis teretibus erectis, summitate bifida, *Faun. Suec.* 43. *Br. Zool.* 18.

NAMES.

Brit. Iwrch, *fæm.* Iyrchell
Fren. Le Chevreuil
Ital. Capriolo
Span. Zorlito, Cabronzillo montes
Port. Cabra montes
Ger. Reechbock, *fæm.* Reechgeis
Swed. Radiur, Rabock
Dan. Raaedijr Raaebuk

THE roebuck prefers a mountainous woody country to a plain one; was formerly very common in *Wales*, in the north of *England*, and in *Scotland*; but at present the species no longer exists in any part of *Great-Britain*, except in the *Scottish* highlands.

This is the leſt of the deer kind, being only three feet four inches long, and two feet two inches high: The horns are from eight to nine inches long, upright, round, and divided into only three branches; their lower part is ſulcated lengthways, and extremely rugged; of this part is made handles for couteaus, knives, *&c.* The body is covered with very long hair, well adapted to the rigor of the highland air; the lower part of each hair is aſh-color; near the ends is a narrow bar of black, and the points are yellow: The hairs on the face are black, tipped with aſh-color; the ears are long, their inſides of a pale

yellow, and covered with long hair, the ſpaces bordering on the eyes and mouth are black.

The cheſt, belly, and legs, and the inſide of the thighs, are of a yellowiſh white, the rump is of a pure white; the tail is very ſhort.

The make of the roebuck is very elegant, and formed for agility: theſe animals do not keep in herds like other deer, but only in families; they bring two fawns at a time, which the female is obliged to conceal from the buck while they are very young. The fleſh of theſe creatures is reckoned a delicate food.

In the old *Welſh* laws, a roebuck was valued at the ſame price as a ſhe-goat: a ſtag at the price of an ox; and a fallow deer was eſteemed equal to that of a cow; or, as ſome ſay, a he-goat *.

It will not be foreign to the preſent ſubject, to mention the vaſt horns frequently found in *Ireland*, and others ſometimes met with in our own kingdom. The latter are evidently of the ſtag kind, but much ſtronger, thicker, heavier, and furniſhed with fewer antlers than thoſe of the preſent race; of thoſe ſome have been found on the ſea-coaſt of *Lancaſhire* †, and a ſingle horn was dug a few years ago out of the ſands near *Cheſter*. Thoſe found in ‡ *Ireland* muſt be referred to the elk kind, but of a ſpecies different from the *European*, being provided with brow antlers which that wants. Entire ſkeletons of this animal are ſometimes met with; the ſoil a white marle. Some of theſe horns are four feet between

* *Leges Walliæ*. 258. † *Ph. tr.* No. 422.
‡ No. 227. *Boate's Nat. Hiſt. Ireland*. 137.

tip

tip and tip. Not the faintest account is left of the existence of these animals, so that they may possibly be ranked among those remains which fossilists distinguish by the title of diluvian. We shall leave this question to be decided by the joint efforts of the naturalist and antiquarian.

Genus VI. The HOG.

Species I. The HOG.

Sus, seu Porcus domesticus.
Raii syn. quad. 92.
Gesner quad. 872.
Charleton ex. 14.
Sus caudatus auriculis oblongis acutis, cauda pilosa. *Brisson quad.* 74.
De Buffon Tom. v. 99. Tab. 6. 17.
Klein quad. 25.
Sus scrofa, *Lin. syst.* 102.
Sus dorso antice setoso, cauda pilosa. *Faun. Suec.* 21.
Br. Zool. 19.

NAMES.

	Boar.	Sow.	Hog.
Brit.	Baedd	Hwch	Mochyn
Fren.	Le Verrat	La Truye	Porc
Ital.	Verro	Porca	Porco
Span.	Berraco	Puerca	Puerco
Port.		Porca	Porco
Germ.	Æber	Sauw	Barg
Dut.	Beer	Soch	Varken
Swed.		Swiin	
Dan.	Orne	Soë	

ACCORDING to common appearances, the hog is certainly the most impure and filthy of all quadrupeds: we should however reflect that filthiness is an idea merely relative to ourselves; but we form a partial judgment from our own sensations, and overlook that wise maxim of providence, that every part of the creation should have its respective inhabitants.

tants. By this œconomy of nature, the earth is never overſtocked, nor any part of the creation uſeleſs. This obſervation may be exemplified in the animal before us; the hog alone devouring what is the refuſe of all the reſt, and contributing not only to remove what would be a nuiſance to the human race; but alſo converting the moſt nauſeous offals into the richeſt nutriment: for this reaſon its ſtomach is capacious, and its gluttony exceſſive; not that its palate is inſenſible to the difference of eatables; for where it finds variety, it will reject the worſt with as diſtinguiſhing a taſte as other quadrupeds *. In the orchards of peach-trees in *North-America*, where hogs have plenty of delicious food, it is obſerved that they will reject the fruit that has lain but a few hours on the ground, and continue on the watch for a long time for a freſh wind-fall.

This animal has (not unaptly) been compared to a miſer, who is uſeleſs and rapacious in his life; but on his death becomes of public uſe, by the very effects of his ſordid manners. The hog during life does not render the leſt ſervice to mankind, except in removing that filth which other animals reject: his more than common brutality, urges him to devour even his own off-ſpring. All other domeſtic quadru-

* The ingenious author of the *Pan Suecus*, has proved this beyond contradiction, having with great induſtry drawn up tables of the number of vegetables, which each domeſtic animal chuſes, or rejects: and it is found that the hog eats but 72, and refuſes 171 plants,

The Ox	eats	276.	rejects 218.	
Goat		449.	126.	
Sheep		387.	141.	
Horſe		262.	212.	*Amæn. Acad.* ii. 203.

peds

peds ſhew ſome degree of reſpect to mankind; and even a ſort of tenderneſs for us in our helpleſs years; but this animal will devour infants, whenever it has opportunity.

The parts of this animal are finely adapted to its way of life: as its method of feeding is by turning up the earth with its noſe for roots of different kinds; ſo nature has given it a more prone form than other animals; a ſtrong brawny neck; eyes ſmall, and placed high in the head; a long ſnout, noſe callous and tough, and a quick ſenſe of ſmelling to trace out its food. Its inteſtines have a ſtrong reſemblance to thoſe of the human ſpecies; a circumſtance that ſhould mortify our pride. The external form of its body is very unweildy, yet, by the ſtrength of its tendons, the wild boar (which is only a variety of the common kind) is enabled to fly from the hunters with amazing agility: the back toe on the feet of this animal prevents its ſlipping while it deſcends declivities, and muſt be of ſingular uſe when purſued: yet, notwithſtanding its powers of motion, it is by nature ſtupid, inactive, and drowſy; much inclined to increaſe in fat, which is diſpoſed in a different manner from other animals, and forms a regular coat over the whole body. It is reſtleſs at a change of weather, and in certain high winds is ſo agitated as to run violently, ſcreaming horribly at the ſame time: it is fond of wallowing in the dirt, either to cool its ſurfeited body, or to deſtroy the lice, ticks, and other inſects with which it is infeſted. Its diſeaſes generally ariſe from intemperence; meaſles, impoſtumes, and ſcrophulous complaints are reckoned among them.

Linnæus obſerves that its fleſh is a wholeſome food for athletic conſtitutions, or thoſe that uſe much exerciſe; but bad for ſuch as lead a ſedentary life: it is though of moſt univerſal uſe, and furniſhes numberleſs materials for epicuriſm, among which brawn is a kind peculiar to *England*. The fleſh of the hog is an article of the firſt importance to a naval and commercial nation, for it takes ſalt better than any other kind, and conſequently is capabable of being preſerved longer. The lard is of great uſe in medicine, being an ingredient in various ſorts of plaiſters, either pure, or in the form of pomatum; and the briſtles are formed into bruſhes of ſeveral kinds.

The wild-boar was formerly a native of our country, as appears from the laws of *Hoel dda* *, who permitted his grand huntſman to chace that animal from the middle of *November* to the beginning of *December*. *William* the Conqueror puniſhed with the loſs of their eyes, any that were convicted of killing the wild-boar, the ſtag, or the roebuck †; and *Fitz-Stephens* tells us, that the vaſt foreſt that in his time grew on the north ſide of *London*, was the retreat of ſtags, fallow deer, wild-boars, and bulls.

* *Leges Wallicæ*, 41. † *Leges Saxon.* 292.

Div. II. DIGITATED QUADRUPEDS.

Genus VII. The CAT.

Species I. The DOMESTIC CAT.

Felis domestica seu catus. *Raii syn. quad.* 170. *Charlton ex.* 20. *Meyer's an.* i. Tab. 15. *Gesner quad.* 317. *Brisson quad.* 191. *De Buffon, Tom.* vi. 3; Tab. 3. Felis catus, *Lin. syst.* 62. Felis cauda elongata, auribus æqualibus. *Faun. Suec.* 9. *Br. Zool.* 21.

NAMES.

Brit.	Cath, *masc.* Gwr cath	*Germ.*	Katz
Fren.	Le Chat	*Dut.*	Cyperse Kat. Huyskat.
Ital.	Gatto	*Swed.*	Katta
Span.	Gato	*Dan.*	Kat
Port.	Gato		

THIS animal, is so well known as to make a description of it unnecessary. It is an useful, but deceitful domestic; active, neat, sedate, intent on its prey. When pleased purres and moves its tail: when angry spits, hisses, and strikes with its foot. When walking, it draws in its claws: it drinks little; is fond of fish; its urine is corrosive: it buries its dung: it washes his face with its fore-foot, (*Linnæus* says at the approach of a storm) the female is remarkably salacious; a piteous, squalling, jarring lover. Its eyes shine in the night: its hair when rubbed in the dark emits fire: it is even proverbially tenacious of life: always lights on its feet: is fond of perfumes; *Marum, Cat-mint, valerian*, &c. *

* Vide. *Lin. syst.*

Our

Our anceſtors ſeemed to have had a high ſenſe of the utility of this animal. That excellent Prince *Hoel dda*, or *Howel* the *Good*, did not think it beneath him (among his laws relating to the Prices, &c. of animals *,) to include that of the cat; and to deſcribe the qualities it ought to have. The price of a kitling before it could ſee, was to be a penny; till it caught a mouſe two-pence; when it commenced mouſer four-pence. It was required beſides, that it ſhould be perfect in its ſenſes of hearing and ſeeing; be a good mouſer; have the claws whole, and be a good nurſe: but if it failed in any of theſe qualities, the ſeller was to forfeit to the buyer the third part of its value. If any one ſtole or killed the cat that guarded the Prince's granary, he was to forfeit a milch ewe, its fleece and lamb; or as much wheat as when poured on the cat ſuſpended by its tail (the head touching the floor) would form a heap high enough to cover the tip of the former †. This laſt quotation is not only curious, as being an evidence of the ſimplicity of ancient manners, but it almoſt proves to a demonſtration that cats are not aborigines of theſe iſlands; or known to the earlieſt inhabitants. The large prices ſet on them, (if we conſider the high value of ſpecies at that time ‡) and the great care taken of the improvement and breed of an animal that multiplies ſo faſt, are almoſt certain proofs of their being little known at that period.

* *Leges Wallicæ*, p. 247, 248.

† Sir *Ed. Coke* in his Reports, mentions the ſame kind of puniſhment anciently for killing a ſwan, by ſuſpending it by the bill, &c. Vide, *Caſe des Swannes*.

‡ *Howell dda* died in the year 948, after a reign of thirty-three years over *South Wales*, and eight years over all *Wales*.

The

The WILD CAT.

Felis pilis ex fuſco flavicante, et albido variegatis veſtita, cauda annulis alternatim nigris et ex ſordide albo flavicantibus cincta. *Briſſon quad.* 192. *De Buffon*, Tom. vi. 20. Tab. 1. *Morton Northampt.* 443. *Geſner quad.* 325. Catus ſylveſtris ferus vel feralis eques arborum, *Klein quad.* 75. *Br. Zool.* 22.

NAMES.

Brit.	Cath goed	*Germ.*	Wilde katze, Boumrutter
Fren.	Le Chat Sauvage	*Dan.*	Vild kat
Span.	Gato Montis		

THIS animal does not differ ſpecifically from the tame cat; the latter being originally of the ſame kind, but altered in color, and in ſome other trifling accidents, as are common to animals reclaimed from the woods and domeſticated.

The cat in its ſavage ſtate is three or four times as large as the houſe-cat; the head larger, and the face flatter. The teeth and claws, tremendous; its muſcles very ſtrong; as being formed for rapine; the tail is of a moderate length, but very thick and flat, marked with alternate bars of black and white, the end always black: the hips and hind part of the lower joints of the leg, are always black: the fur is very ſoft and fine: the general colour of theſe animals is of a yellowiſh white, mixed with a deep grey: theſe colors, though they appear at firſt ſight confuſedly blended together, yet on a cloſe inſpection will be found to be diſpoſed like the ſtreaks on the ſkin of the tiger, pointing from the back downwards, riſing from a black liſt that runs from the head along the middle of the back to the tail.

This

This animal may be called the *Britiſh* tiger; it is the fierceſt, and moſt deſtructive beaſt we have; making dreadful havoke among our poultry, lambs, and kids. It inhabits the moſt mountainous and and woody parts of theſe iſlands, living moſtly in trees, and feeding only by night. It multiplies as faſt as our common cats; and often the females of the latter will quit their domeſtic mates, and return home pregnant by the former.

They are taken either in traps, or by ſhooting: in the latter caſe it is very dangerous, only to wound them! for they will attack the perſon who injured them, and have ſtrength enough to be no deſpicable enemy. Wild cats were formerly reckoned among the beaſts of chace; as appears by a charter of *Richard* the ſecond, to the abbot of *Peterborough*, giving him leave to hunt the hare, fox, and wild cat: and in much earlier times it was alſo the object of the ſportſman's diverſion.

Felemque minacem
Arboris in trunco longis præfigere telis.
Nemeſiani Cynegeticon, L. 55.

Genus

Genus VIII. The DOG.

Species I. The DOG.

Canis, *Raii ſyn. quad.* 175.
Charlton ex. 26.
Merret pinax, 168.
Geſner quad. 160, 249. 250.
Canis domeſticus, *Briſſon quad.* 170.
De Buffon, Tom. v. p. 185.
Klein quad. 63.
Canis familiaris. *Lin. ſyſt.* 56.
Canis cauda recurva. *Faun. Suec.* 5.
Brit. Zool. 23.

NAMES.

Brit.	Ci, *fæm.* Gaſt	*Germ.*	Hund
Fren.	Le Chien	*Dut.*	Hond
Ital.	Cane	*Swed.*	Hund
Span.	Perro	*Dan.*	Hund, *fæm.* Tæve
Port.	Cam		

DR. *Caius*, an *Engliſh* phyſician, who flouriſhed in the reign of queen *Elizabeth*, has left among ſeveral other tracts relating to natural hiſtory, one wrote expreſsly on the ſpecies of *Britiſh* dogs: they were wrote for the uſe of his learned friend *Geſner*; with whom he kept a ſtrict correſpondence; and whoſe death he laments in a very elegant and pathetic manner.

Beſides a brief account of the variety of dogs then exiſting in this country, he has added a ſyſtematic table of them: his method is ſo judicious, that we ſhall make uſe of the ſame; explain it by a brief account of each kind; and point out thoſe that are no longer in uſe among us.

SYNOPSIS of BRITISH DOGS.

- I. The most generous kinds.
  - Dogs of chace.
    - Hounds
      - Terrier
      - Harrier
      - Blood hound
    - Gaze hound
    - Grey hound
    - Leviner, or Lyemmer
    - Tumbler
  - Fowlers.
    - Spaniel
    - Setter
    - Water ſpaniel, or finder
  - Lap Dogs.
    - Spaniel gentle, or comforter
- II. Farm Dogs.
  - Shepherd's dog
  - Maſtiff, or ban dog
- III. Mongrels.
  - Wappe
  - Turnſpit
  - Dancer

The firſt variety is the *Terrarius* or *Terrier*, which takes its name from its ſubterraneous employ; being a ſmall kind of hound, uſed to force the fox, or other beaſts of prey, out of their holes; (and in former times) rabbets out of their buroughs into nets.

The *Leverarius*, or *Harrier*, is a ſpecies well known at preſent; it derives its name from its uſe, that of hunting the hare; but under this head may be placed the fox hound, which is only a ſtronger and fleeter variety, applied to a different chace *.

* Prince *Griffith ap Conan* (who begun his reign in the year 1079) divided hunting into three kinds: the firſt and nobleſt ſort was the *Helfa ddoleſ*, which is hunting for the melody of the cry, or notes of the

The *Sanguinarius*, or *Bloodhound*, was a dog of great uſe, and in high eſteem with our anceſtors: its employ was to recover any game that had eſcaped wounded from the hunter; or been killed and ſtole out of the foreſt. It was remarkable for the acuteneſs of its ſmell, tracing the loſt beaſt by the blood it had ſpilt; from whence the name is derived: This ſpecies could, with the utmoſt certainty, diſcover the thief by following his footſteps, let the diſtance of his flight be ever ſo great; and through the moſt ſecret and thickeſt coverts: nor would it ceaſe its purſuit, till it had taken the felon. The bloodhound was in great requeſt on the confines of *England* and *Scotland*; where the borderers were continually preying on the herds and flocks of their neighbours.

The next diviſion of this ſpecies of dogs, comprehends thoſe that hunt by the eye; and whoſe ſucceſs depends either upon the quickneſs of their ſight, their ſwiftneſs, or their ſubtility.

The *Agaſæus*, or Gazehound, was the firſt: it chaced indifferently the fox, hare, or buck. It would ſelect from the herd the fatteſt and faireſt deer; purſue it by the eye; and if loſt for a time, recover it again by its ſingular diſtinguiſhing faculty; and ſhould the beaſt rejoin the herd, this dog would fix unerringly on the ſame. This ſpecies is now loſt, or at leaſt unknown to us.

the pack: The ſecond ſort was the *Helfa gyfartha*, or hunting when the animal ſtood at bay: The laſt kind was the *Helfa gyffredin*, i e. common hunting; which was no more than the right any perſon had, who happened accidentally to come in at the death of the game, to claim a ſhare. *Lewis's Hiſt. of Wales*, 56.

It must be observed that the *Agasæus* of Dr. *Caius*, is a very different species from the *Agasseus* of *Oppian*, for which it might be mistaken from the similitude of names: this he describes as a small kind of dog, peculiar to *Great-Britain*; and then goes on with these words;

Γυρὰν, ἀσαρκότατον λασιότριχον, ὄμμασι νωθὶς.

Curvum, macilentum, hispidum oculis pigrum.

what he adds afterwards, still marks the difference more strongly;

Ῥίνεσιδ αὖτε μάλιςα πανίξοκος ἐςὶν ἀγασσεὺς.

Naribus autem longè præstantissimus est agasseus.

From *Oppian's* whole description, it is plain he meant our Beagle *.

The next kind is the *Leporarius*, or Gre-hound. Dr. *Caius* informs us, that it takes its name *quod præcipui gradus sit inter canes*: the first in rank among dogs; that it was formerly esteemed so, appears from the forest laws of king *Canute*; who enacted, that no one under the degree of a gentleman should presume to keep a gre-hound; and still more strongly from an old *Welsh* saying; *Wrth ei Walch, ei Farch, a't Filgi, yr adwaenir Bonheddig*: Which signifies, that you may know a gentleman by his hawk, his horse and his gre-hound.

* *Opp. Cyneg. lib.* i. *lin.* 473. 476.
Nemesianus also celebrates our dogs.

Divisa *Britannia* mittit
Veloces, nostrique orbis venantibus aptos.

Froissart

Froiſſart relates a fact not much to the credit of the fidelity of this ſpecies: when that unhappy prince *Richard* the ſecond was taken in *Flint* caſtle, his favorite gre-hound immediately deſerted him, and fawned on his rival *Bolingbroke*; as if he underſtood, and foreſaw the misfortunes of the former *. The ſtory is ſo ſingular, that we give it in the note in the words of the hiſtorian.

The third ſpecies is the *Levinarius*, or *Lorarius*; The Leviner or Lyemmer: the firſt name is derived from the lightneſs of the kind; the other from the old word *Lyemme*, a thong: this ſpecies being uſed to be led in a thong, and ſlipped at the game. Our author ſays, that this dog was a kind that hunted both by ſcent and ſight; and in the form of its body ob-

* Le Roy *Richard* auoit vn Leurier (lequel on nommoit Math) treſbeau Leurier outre meſure: & ne vouloit ce chien congnoiſtre nul homme, fors le Roy: &, quand le Roy vouloit cheuaucher; celuy, qui l'auoit en garde, le laiſſoit aller: & ce Leurier venoit tantoſt deuers le Roy, le feſtoyer: & luy mettoit, incontinent qu'il eſtoit échapé, les deux piés ſur les eſpaules: et adoncques auint, que, le Roy & le Comte d'Erby parlans enſemble en la place de la court dudit chaſteau, & eſtans leurs cheuaux tous ſellés (car ils vouloyent monter à cheual) ce Leurier, nommé Math (qui eſtoit couſtumier de faire au Roy ce, que dit eſt) laiſſa le Roy: & s'en vint au Duc de Lanclaſtre, & luy fit toutes telles contenances, que par-auant il auoit accouſtumé de faire au Roy: & luy aſſit les deux piés ſur le col: & le commença moult grandement à cherir. Le Duc de Lanclaſtre (qui point ne congnoiſſoit ce Leurier) demanda au Roy, Et que veut ce Leurier faire? Couſin (dît le Roy) ce vous eſt vne grand' ſignifiance, & à moy petite. Coment (dît le Duc) l'entendez vous? Ie l'enten, dît le Roy. Le Leurier vous feſtoye, & recueult auiourdhuy, commme Roy d'Angleterre, que vous ſerez, & i'en ſeray deposé: et le Leurier en a congnoiſſance naturelle. Si le tenez delez vous car il vous ſuiura, & m'elongnera. Le Duc de Lanclaſtre entendit bien ceſte parolle: & fit chere au Leurier: lequel oncques depuis ne voulut ſuiure Richard de Bordeaux; mais ſuiuit le Duc de Lanclaſtre. *Edition de Lyon*, 1559.

ſerved a medium between the hound, and the gre-hound. This probably is the kind now known to us by the name of the *Iriſh* gre-hound.

The *Vertagus*, or Tumbler, is a fourth ſpecies; which took its prey by mere ſubtility, depending neither on the ſagacity of its noſe, nor its ſwiftneſs: if it came into a warren, it neither barked, or ran on the rabbets; but by a ſeeming neglect of them, or attention to ſomething, deceived the object till it got within reach, ſo as to take it by a ſudden ſpring. This dog was leſs than the hound; more ſcraggy, and had prickt up ears; and by Dr. *Caius*'s deſcription ſeems to anſwer to the modern lurcher.

The third diviſion of the more generous dogs, comprehends thoſe which were uſed in fowling; firſt, the *Hiſpaniolus* or ſpaniel: from the name it may be ſuppoſed, that we were indebted to *Spain* for this breed: there were two varieties of this kind, the firſt uſed in hawking, to ſpring the game, which are the ſame with our ſtarters.

The other variety was uſed only for the net, and was called *Index*, or the ſetter; a kind well known at preſent. This kingdom has long been remarkable for producing excellent dogs of this ſort, particular care having been taken to preſerve the breed in the utmoſt purity. They are ſtill diſtinguiſhed by the name of *Engliſh* ſpaniels; ſo that notwithſtanding the derivation of the name, it is probable they are natives of *Great-Britain*. The Pointer, which is a dog of foreign extraction, was unknown to our anceſtors.

The *Aquaticus*, or Fynder, was another ſpecies uſed in fowling; was the ſame as our water ſpaniel;

and was uſed to find or recover the game that was ſhot.

The *Melitæus*, or *Fotor*; the ſpaniel gentle or comforter of Dr. *Caius* (the modern lap dog) was the laſt of this diviſion. The *Malteſe* little dogs were as much eſteemed by the fine ladies of paſt times, as thoſe of *Bolegna* are among the modern. Old *Hollingſhed* is ridiculouſly ſevere on the fair of his days, for their exceſſive paſſion for theſe little animals; which is ſufficient to prove it was in his time * a novelty.

The ſecond grand diviſion of dogs comprehends the *Ruſtici*; or thoſe that were uſed in the country.

The firſt ſpecies is the *Paſtoralis*, or ſhepherd's dog; which is the ſame that is uſed at preſent, either in guarding our flocks, or in driving herds of cattle. This kind is ſo well trained for thoſe purpoſes, as to attend to every part of the herd be it ever ſo large; confine them to the road, and force in every ſtraggler without doing it the leaſt injury.

The next is the *Villaticus*, or *Catenarius*; the *maſtiff* or *band* dog; a ſpecies of great ſize and ſtrength, and a very loud barker. *Manwood* ſays †, it derives its name from *maſe theſeſe*, being ſuppoſed to frighten away robbers by its tremendous voice. *Caius* tells us that three of theſe were reckoned a match for a bear; and four for a lion: but from an experiment made in the Tower by *James* the firſt, that noble quadruped was found an unequal match to only three. Two of the dogs were diſabled in the combat, but the third forced the lion to ſeek for ſafety by flight ‡. The

* In the reign of Queen *Elizabeth*. † *Manwood's Foreſt Law*.
‡ *Stow's Annales*, 1427.

English bull dog ſeems to belong to this ſpecies; and probably is the dog our author mentions under the title of *Laniarius*. *Great-Britain* was ſo noted for its maſtives, that the *Roman* Emperors appointed an officer in this iſland with the title of *Procurator Cynegii* *, whoſe ſole buſineſs was to breed, and tranſmit from hence to the *Amphitheater*, ſuch as would prove equal to the combats of the place.

Magnaque taurorum fracturi colla *Britanni* †.

Gratius ſpeaks in high terms of the excellency of the *Britiſh* dogs,

Atque ipſos libeat penetrare *Britannos*?
O quanta eſt merces et quantum impendia ſupra!
Si non ad ſpeciem mentituroſque decores
Protinus: hæc una eſt catulis jactura *Britannis*.
Ad magnum cum venit opus, promendaque virtus,
Et vocat extremo præceps diſcrimine mavors,
Non tunc egregios tantum admirere *Molloſſos* ‡.

Strabo tells us, that the maſtives of *Britain* were trained for war, and were uſed by the *Gauls* in their battles ‖; and it is certain a well-trained maſtiff might be of conſiderable uſe in diſtreſſing ſuch half-armed and irregular combatants as the adverſaries of the *Gauls* ſeem generally to have been before the *Romans* conquered them.

The laſt diviſion is that of the *Degeneres*, or *Curs*.

* *Camd. Brit.* in *Hampſhire*.
† *Claudian* de laude *Stilichonis*, *Lib.* iii. *Lin.* 301.
‡ *Gratii* Cynegeticon. *Lin.* 175. ‖ *Strabo*, *Lib.* iv.

The

The first of these was the *Wappe*, a name derived from its note; its only use was to alarm the family, by barking, if any person approached the house. Of this class was the *Versator*, or turnspit; and lastly the *Saltator*, or dancing dog; or such as was taught variety of tricks, and carried about by idle people as a shew. These *Degeneres* were of no certain shape, being mongrels, or mixtures of all kinds of dogs.

We should now, according to our plan, after enumerating the several varieties of *British* dogs, give its general natural history, but since *Linnæus* has already performed it to our hand, we shall adopt his sense, translating his very words (wherever we may) with literal exactness.

" The dogs eats flesh, and farinaceous vegetables,
" but not greens: its stomach digests bones: it uses
" the tops of grass as a vomit. It voids its excre-
" ments on a stone: the album græcum is one of the
" greatest encouragers of putrefaction. It laps up
" its drink with its tongue: it voids its urine sideways,
" by lifting up one of its hind legs; and is most diu-
" retic in the company of a strange dog. *Odorat*
" *anum alterius*: its scent is most exquisite, when its
" nose is moist: it treads lightly on its toes; scarce
" ever sweats; but when hot lolls out its tongue.
" It generally walks frequently round the place it in-
" tends to lye down on: its sense of hearing is very
" quick when asleep: it dreams. *Procis risantibus*
" *crudelis; catulit cum ursis: mordet illa illos: cobaret*
" *copula junctus*: it goes with young sixty-three
" days; and commonly brings from four to eight at
" a time: the male puppies resemble the dog, the
" female

" female the bitch. It is the moſt faithful of all " animals: is very docible: hates ſtrange dogs: " will ſnap at a ſtone thrown at it: will howl at " certain muſical notes: all (except the *S. American* " kind) will bark at ſtrangers: dogs are rejected by " the *Mahometans*."

Species II. The FOX.

Vulpes. *Raii ſyn. quad.* 177. *Morton's Northampt.* 444. *Meyer's an.* i. Tab. 36. Canis fulvus, pilis cinereis intermixtis. *Briſſon quad.* 173. *De Buffon. Tom.* vii. 75. Tab. 6. *Geſner quad.* 966. Vulpes auctorum. *Haſſelquiſt Itin.* 191. Canis vulpes. *Lin. ſyſt.* 59. Canis cauda recta apice albo. *Faun. Suec.* 7. Vulpes vulgaris. *Klein quad.* 73. *Br. Zool.* 28.

NAMES.

Brit.	Llwynog, *fœm.* Llwynoges	*Germ.*	Fuchs
Fren.	Le Renard	*Dut.*	Vos
Ital.	Volpe	*Swed.*	Raff
Span.	Raposa	*Dan.*	Rev
Port.	Rapoza		

THE fox is a crafty, lively, and libidinous animal, it breeds only once in a year (except ſome accident befals its firſt litter;) and brings four or five young, which, like puppies, are born blind. It has been a common received opinion, that this animal would produce with the dog kind, but ſome late experiments prove it to be erroneous, and convince us that this animal will mix only with its own ſpecies *.

* We owe the detection of this error to *M. de Buffon*, who gives the following account of the experiment: *J'en fis garder trois pendent deux ans une femelle & deux mâles: on tenta inutilement de les faires accoupler avec des chiennes; quoiqu'ils n'euſſent jamais vû de femelles de leur*

It ſleeps much in the day, but is in motion the whole night in ſearch of prey. It will feed on fleſh of any kind, but its favorite food is lambs, rabbets, hares, poultry, and feathered game. It will, when urged by hunger, eat carrots and inſects; and thoſe that live near the ſea-coaſts, will, for want of other food, eat crabs, ſhrimps, or ſhell fiſh. In *France* and *Italy*, it does incredible damage in the vineyards, by feeding on the grapes, of which it is very fond. The fox is a great deſtroyer of rats, and field mice; and like the cat, will play with them a conſiderable time, before it it puts them to death.

When the fox has acquired a larger prey than it can devour at once, it never begins to feed till the reſt is ſecured, which it does with great addreſs. It digs holes in different places, returns to the ſpot where it had left the booty; and (ſuppoſing a whole flock of poultry to have been its prey) will bring them one by one, and thruſt them in with its noſe, and then conceal them by ramming the looſe earth on them, till the calls of hunger incite him to pay them another viſit.

Of all animals the fox has the moſt ſignificant eye, by which it expreſſes every paſſion of love, fear, hatred, &c. It is remarkably playful, but like all other ſavage creatures half reclaimed, will on the leaſt offence bite thoſe it is moſt familiar with.

leur eſpece, et qu'ils paruſſent preſſé du beſoin de jouir, il ne purent s'y determiner, ils refuſerent toutes les chiennes, mais de qu'on leur preſenta leur femelle legetime, ils la couvrirent, quoiqu'enchainés et elle producit quatre petits. *Hiſt. Naturelle*, vii. 81. The ſame experiments were tried with a bitch and a male fox; and with a dog and female wolf, but with the ſame effect. *Vide* vol. v. 210, 212.

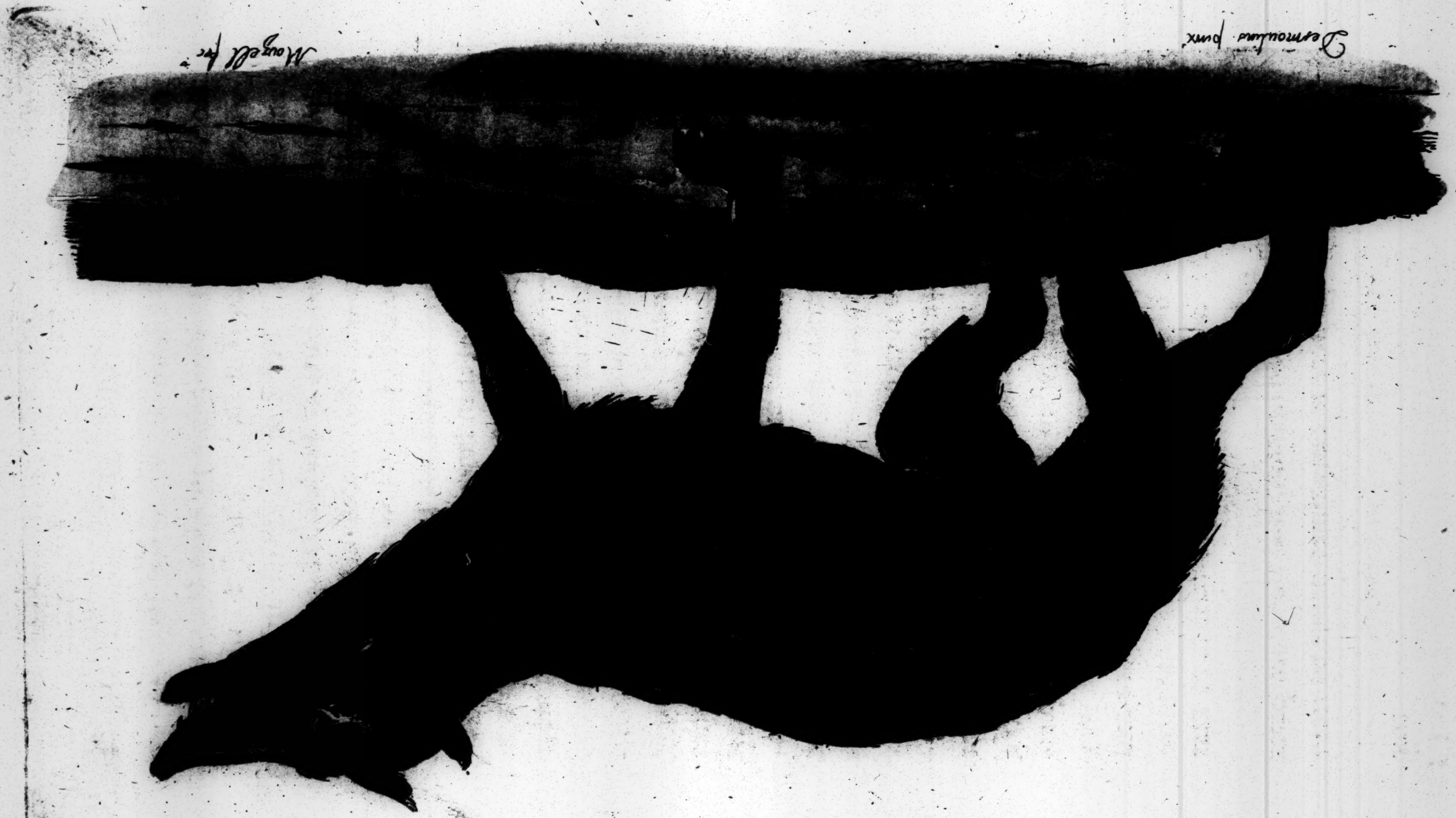
It is a great admirer of its bushy tail, with which it frequently amuses and exercises itself by running in circles to catch it: and in cold weather wraps it round its nose.

The smell of this animal in general is very strong, but that of the urine is most remarkably fætid. This seems so offensive even to itself, that it will take the trouble of digging a hole in the ground, stretching its body at full length over it, and there, after depositing its water, cover it over with the earth, as the cat does its dung. The smell is so offensive, that it has often proved the means of the fox's escape from the dogs, who have so strong an aversion to the filthy *effluvia*, as to avoid encountring the animal it came from. It is said that the fox makes use of its urine as an expedient to force the cleanly badger from its habitation: whether that is the means is rather doubtful; but that the fox makes use of the badger's hole is certain; not through want of ability to form its own retreat; but to save itself some trouble: for after the expulsion of the first inhabitant, the fox improves, as well as enlarges it considerably, adding several chambers; and providently making several entrances to secure a retreat from every quarter. In warm weather it will quit its habitation for the sake of basking in the sun, or to enjoy the fresh air; but then it rarely lies exposed, but chuses some thick brake, and generally of gorse, that it may rest secure from surprize. Crows, magpies, and other birds, who consider the fox as their common enemy, will often, by their notes of anger, point out its retreat.

This animal is common in all parts of *Great Britain*,

Drawn from Life by

Engraved by



The WOLF.

tain, and ſo well known as not to require a deſcription. The ſkin is furniſhed with a ſoft and warm fur, which in many parts of *Europe* is uſed to make muffs and line cloaths. Vaſt numbers are taken in *Le Vallais*, and the *Alpine* parts of *Switzerland*. At *Lauſanne* there are furriers who are in poſſeſſion of between two and three thouſand ſkins, all taken in one winter.

There are three varieties of foxes found in the mountainous parts of the iſlands, which differ a little in form, but not in color, from each other. Theſe are diſtinguiſhed in *Wales*, by as many different names. The *Milgi* or *gre-hound fox*, is the largeſt, talleſt, and boldeſt; and will attack a grown ſheep or wether: the *maſtiff fox* is leſs, but more ſtrongly built: the *Corgi*, or *cur fox*, is the leaſt, and lurks about hedges, out-houſes, &c. and is the moſt pernicious of the three to the feathered tribe. The numbers of theſe animals in general would ſoon become intolerable, if they were not proſcribed, having a certain reward ſet on their heads.

In this place we ſhould introduce the wolf, a non-generous animal, if we had not fortunately a juſt right to omit it in a hiſtory of *Britiſh* quadrupeds. We cannot for certain ſay when it was extirpated in *Scotland*, but it was, as appears by *Hollingſhed* *, very noiſome to the flocks in 1577; however, we are told that none are to be found there at preſent, ſo have reaſon to think *M. de Buffon* was miſinformed as to that particular †.

It has been a received opinion, that the other parts of theſe kingdoms were in early times delivered from

* *Diſc. Scot.* 18. † *Tom.* vii.

this

this peſt by the care of king *Edgar*. In *England* he attempted to effect it by commuting the puniſhments for certain crimes into the acceptance of a number of wolves tongues from each criminal: in *Wales* by converting the tax of gold and ſilver into an annual tribute of 300 wolves heads. Notwithſtanding theſe his endeavours, and the aſſertions of ſome authors, his ſcheme proved abortive. We find that ſome centuries after the reign of that *Saxon* monarch, theſe animals were again increaſed to ſuch a degree, as to become the object of the royal attention; accordingly *Edward* the firſt iſſued out his mandate to *Peter Corbet* to ſuperintend and aſſiſt in the deſtruction of them in the ſeveral counties of *Glouceſter*, *Worceſter*, *Hereford*, *Salop*, and *Stafford* *: and in the adjacent county of *Derby*, as *Camden*, p. 902, informs us, certain perſons at *Wormhill* held their lands by the duty of hunting and taking the wolves that infeſted the country, whence they were ſtiled *Wolve hunt*. To look back into the *Saxon* times we find that in *Athelſtan's* reign wolves abounded ſo in *Yorkſhire*, that a retreat was built at *Flixton* in that county, *to defend paſſengers from the wolves, that they ſhould not be devoured by them* †: and ſuch ravages did thoſe animals make during winter, particularly *January* when the cold was ſevereſt, that our *Saxon* anceſtors

* Pro *Petro Corbet, de Lupis Capiendis.*

Rex, omnibus Ballivis, &c. Sciatis quod injunximus dilecto et fideli noſtro Petro Corbet *quod in omnibus foreſtis et parcis et aliis locis infra comitatus noſtros* Glouceſter, Wygorn, Hereford, Salop, *et* Stafford, *in quibus lupi poterunt inveniri lupos cum hominibus canibus et ingeniis ſuis capiat et deſtruat modis omnibus quibus viderit expedire.*

Et ideo vobis mandamus quod eidem intendentes et auxiliantes eſtis. Teſte Rege apud Weſtm. 14 Maii A. D. 1281. Rymer, vol. i. pars 2. p. 192.

† *Camden's Brit.* 902.

diſ-

distinguished that month by the title of *wolf-month* *. They also called an outlaw *Wolfshed* †, as being out of the protection of the law, proscribed, and as liable to be killed as that destructive beast.

They infested *Ireland* many centuries after their extinction in *England*, for there are accounts of some being found there as late as the year 1710. The last presentment for killing of wolves being made in the county of *Cork* about that time.

The Bear, another voracious beast, was once an inhabitant of this island, as appears from different authorities: to begin with the more ancient, *Martial* informs us, that the *Caledonian* bears were used to heighten the torments of the unhappy sufferers on the cross.

Nuda *Caledonio* sic pectora præbuit urso
Non falsâ pendens in cruce *Laureolus* ‡.

And *Plutarch* relates, that Bears were transported from *Britain* to *Rome*, where they were much admired §. Mr. *Llwyd* ‖ also discovered in some old *Welch* MS. relating to hunting, that this animal was reckoned among our beasts of chace, and that its flesh was held in the same esteem with that of the hare or boar. Many places in *Wales* still retain the name of *Pennarth*, or the bear's head, another evidence of their existence in our country. Long after their extirpation out of this kingdom, these animals were imported for an end, that does no credit to the manners of the times: bear-

* *Verstegan's Antiq.* 59. † *Knyghton*, 2356.
‡ *Martial. Lib. Spect. ep.* 7.
§ *Plutarch*, as cited by *Camden*, p. 1227. ‖ *Raii syn. quad.* 214.

baiting

baiting in all its cruelty was a favourite paſtime with our anceſtors. We find it in queen *Elizabeth*'s days exhibited, (tempered with other merry diſports) as an entertainment for an ambaſſador *, and again among the various amuſements prepared for her majeſty at the princely *Kenelworth*.

Genus IX. The BADGER.

Species I. The BADGER.

Badger, Brock, Gray, Pate, Taxus ſive Meles. *Raii ſyn. quad.* 185.
Meyer's an. i. Tab. 31.
Sib. Scot. 11.
Meles pilis ex ſordide albo et nigro variegatis veſtita, capite tæniis alternatim albis et nigris variegato. *Briſſon quad.* 183.
De Buffon, Tom. VII. Tab. 7. p. 104.
Geſner quad. 686.
Urſus meles. Urſus cauda concolore, corpore ſupra cinereo, ſubtus nigro, faſcia longitudinali per oculos aureſque nigra. *Lin. ſyſt.* 70.
Canis cauda brevi. *Klein quad.* 73.
Meles unguibus anticis longiſſimis. *Faun. Suec.* 20.
Br. Zool. 30.

NAMES.

Brit.	Pryf Llwyd, Pryf penfrith	*Germ.*	Tachs
Fren.	Le Taiſſon, Le Blaireau	*Dut.*	Varkens Das
Ital.	Taſſo	*Swed.*	Graf Suin
Span.	Texon	*Dan.*	Grevlin, Brok
Port.	Texugo		

THOUGH the badger is a beaſt of great ſtrength, and is furniſhed with ſtrong teeth, as if formed for rapine, yet it is found to be an animal perfectly inoffenſive: roots, fruits, graſs, inſects, and

* *Stow*, 1562.

frogs

frogs are its food; it is charged with deſtroying lambs and rabbets; but, on enquiry, there ſeems to be no other reaſon to think it a beaſt of prey, than from the analogy there is between its teeth and thoſe of carnivorous animals. Nature denied the badger the ſpeed and activity requiſite to eſcape its enemies, ſo hath ſupplied it with ſuch weapons of offence that ſcarce any creature would hazard the attacking it; few animals defend themſelves better, or bite harder: when purſued, they ſoon come to bay, and fight with great obſtinacy. It is an indolent animal, and ſleeps much, for which reaſon it is always found very fat. It burroughs under ground, like the fox; and forms ſeveral different apartments, though with only one entrance. It confines itſelf to its hole during the whole day, feeding only at night: it is ſo cleanly an animal as never to obey the calls of nature in its apartments; but goes out for that purpoſe: it breeds only once in a year, and brings four or five at a time.

The uſual length of the badger, is two feet four inches, excluſive of the tail, which is but four inches long. The eyes are very ſmall: the ears ſhort and rounded: the neck ſhort: the whole ſhape of the body clumſy and thick; which being covered with long coarſe hairs like briſtles, makes it appear ſtill more aukward.

The noſe, chin, lower ſides of the cheeks, and the middle of the forehead, are white: each ear and eye is incloſed in a pyramidal bed of black; the baſe of which incloſes the former; the point extends beyond the eye to the noſe: the hairs on the body are of three

colors; the bottoms of a dirty yellowiſh white; the middle black; the ends aſh-colored, or grey; from whence the proverb, As grey as a badger. The hairs which cover the tail are very long, and of the ſame colors with thoſe of the body: the throat and under parts of the body are black: the legs and feet of the ſame color, are very ſhort, ſtrong and thick: each foot is divided into five toes; thoſe on the fore-feet are armed with long claws, well adapted for digging; in walking the badger treads on its whole heel, like the bear; which brings the belly very near the ground. Immediately below the tail, between that and the anus, is a narrow tranſverſe orifice, which opens into a kind of pouch, from whence exudes a white ſubſtance of a very fetid ſmell; this ſeems peculiar to the badger and the *Hyæna*.

Naturaliſts once diſtinguiſhed the badger, by the names of the ſwine-badger, and the dog-badger; from the ſuppoſed reſemblance of their heads to thoſe animals, and ſo divided them into two ſpecies: but the moſt accurate obſervers have been able to diſcover only one kind; that, whoſe head and noſe reſemble thoſe of the dog.

Badgers are hunted in the winter nights, for their fleſh and their ſkin: the hind quarters may be made into hams, not inferior in goodneſs to the beſt bacon; the ſkin, when dreſſed with the hair on, is uſed for piſtol furniture; the hair is frequently uſed for making bruſhes to ſoften ſhades in painting; which are called ſweetening tools.

Genus X. The OTTER.

Species I. The OTTER.

Le Loutre, *Belon* 26. *pl.* 27.
Lutra. The otter. *Raii ſyn. quad.* 187.
Grew's muſ. 16.
Morton's Northamp. 444.
Sib. Scot. 10.
Geſner quad. 687.
Lutra caſtanei coloris. *Briſſon quad.* 201.
De Buffon, Tom. vii. 134. Tab. 11.
Muſtela lutra. *Lin. ſyſt.* 66.
Pontop. Norw. 2. 27.
Lutra digitis omnibus æqualibus. *Faun. Suec.* 12.
Br. Zol. 32.

NAMES.

Brit.	Dyfrgi	*Germ.*	Otter, Fiſch Otter
Fren.	Le Loutre	*Dut.*	Otter
Ital.	Lodra, Lodria, Lontra.	*Swed.*	Utter
Span.	Nutria	*Dan.*	Odder
Port.			

THE uſual length of this animal is three feet three inches, including the tail, which is ſixteen inches long.

The head and noſe are broad and flat, the neck ſhort, and equal in thickneſs to the head: the body long: the tail broad at the baſe, tapers off to a point at the end, and is the whole way compreſſed horizontally. The eyes are very ſmall, and placed nearer the noſe than is uſual in quadrupeds: the ears extremely ſhort, and their orifice narrow: the opening of the mouth is ſmall, the lips muſcular, and capable of being brought very cloſe together: the noſe and corners of the mouth are furniſhed with very long whiſkers; ſo that the whole appearance of the otter is ſomething terrible. The legs are very ſhort, but re-

remarkably ſtrong, broad, and muſcular; the joints articulated ſo looſely, that the animal is capable of turning them quite back, and bringing them on a line with the body, ſo as to perform the office of fins. Each foot is furniſhed with five toes, connected by ſtrong broad webs, like thoſe of water fowl. Thus nature in every article has had attention to the way of life ſhe had allotted to an animal, whoſe food is fiſh; and whoſe haunts muſt neceſſarily be about waters.

The color of the otter is entirely a deep brown, except two ſmall ſpots of white on each ſide the noſe, and another under the chin. The ſkin of this animal is very valuable, if killed in the winter; and is greatly uſed in cold countries for lining cloaths: but in *England* it is only uſed for covers for piſtol furniture. The beſt furs of this kind come from the northern part of *Europe*, and *America*.

The otter ſwims and dives with great celerity, and is very deſtructive to fiſh: in rivers it is always obſerved to ſwim againſt the ſtream, to meet its prey. In very hard weather, when its natural ſort of food fails, it will kill lambs and poultry. Its fleſh is exceſſively rank and fiſhy. The *Romiſh* church permits the uſe of it on maigre-days. In the kitchen of the *Carthuſian* convent near *Dijon*, we ſaw one preparing for the dinner of the religious of that rigid order, who, by their rules, are prohibited during their whole lives, the eating of fleſh.

It ſhews great ſagacity in forming its habitation: it burroughs under ground on the banks of ſome river or lake; and always makes the entrance of its hole under water; works upwards to the ſurface of the earth,

earth, and there makes a minute orifice for the admiſſion of air: it is further obſerved, that this animal, the more effectually to conceal its retreat, contrives to make even this little air hole in the middle of ſome thick buſh.

The otter brings four or five young at a time: as it frequents ponds near gentlemen's houſes, there have been inſtances of litters being found in cellars, ſinks, and other drains.

Sir *Robert Sibbald*, in his hiſtory of *Fife*, p. 49, mentions a *Sea Otter*, which he ſays differs from the common ſort, in being larger, and having a rougher coat; but probably it does not differ ſpecifically from the kind that frequents freſh waters. Did not *Ariſtotle* place his *Latax* * among the animals which ſeek their food among freſh waters, we ſhould imagine we had here recovered this loſt animal, which he mentions immediately after the otter, and deſcribes as being broader. Though this muſt remain a doubt, we may with greater confidence ſuppoſe the ſea otter to be the *Loup marin* of *Belon* †, which from a hear-ſay account, he ſays, is found on the *Engliſh* coaſts.

* Τοιαυτα δε εστιν ὁ τε καλουμενος καστωρ, καὶ το σαθειριον καὶ το σαλυριον, καὶ ενυδρις, καὶ ἡ καλουμενη λαιαξ. εστι δε τυτο πλατυτερον ενυδριδος, καὶ οδοντας εχει ισχυρους εξιυσα γαρ νυκτωρ πολλακις, τας περι τον ποταμον κερκιδας εκτεμνει τοις οδουσιον. δακνει δε τους ανθρωπους καὶ ἡ ενυδρις, καὶ ουκ αφιησιν, ως λεγουσι, μεχρις αν οσου ψοφον ακουσῃ. το δε τριχωμα εχει ἡ λαιαξ σκληρον, καὶ το ειδος μεταξυ του της φωκης τριχωματος, καὶ του της ελαφου. *Ariſtot. Hiſt. Anim.* p. 905. A.

Sunt etiam in hoc genere (ſc. animalium quadrupedum quæ victum ex lacubus et fluviis petunt) fiber, ſatherium, ſatyrium, lutris, latax, quæ latior lutre eſt, denteſque habet robuſtos, quippe quæ noctu plerumque agrediens, virgulta proxima ſuis dentibus, ut ferro præcidat. Lutris etiam hominem mordet, nec deſiſtit (ut ferunt) niſi fracti oſſis crepitum ſenſerit. Lataci pilus durus, ſpecie inter pilum vituli marini et cervi.

† *Belon de la Nature des Poiſons*, p. 28. pl. 29.

He

He compares its form to that of a wolf, and ſays, it feeds rather on fiſh than ſheep. That circumſtance alone makes it probable, that *Sibbald*'s animal was intended, it being well known, the otter declines fleſh when it can get fiſh. Little ſtreſs ought to be laid on the name, or compariſon of it to a wolf; this variety being of a ſize ſo ſuperior to the common, and its hair ſo much more ſhaggy, a common obſerver might readily catch the idea of the more terrible beaſt, and adapt his compariſon to it.

Beavers, which are alſo amphibious animals, were formerly found in *Great Britain*; but the breed has been extirpated many ages ago; the lateſt accounts we have of them, is in *Giraldus Cambrenſis* *, who travelled through *Wales* in 1188: he gives a brief hiſtory of their manners; and adds, that in his time they were found only in the river *Teivi*; two or three lakes in that principality, ſtill bear the name of *Llyn yr afangc* †, or the beaver lake; which is a further proof, that theſe animals were found in different parts of it. But we imagine they muſt have been very ſcarce even in earlier times; for by the laws of *Hoel dda*, the price of a beaver's ſkin (*Croen Lloſtlydan* †) was fixed at one hundred and twenty pence, a great ſum in thoſe days.

* *Girald. Camb. Itin.* 178, 179. † *Raii ſyn. quad.* 213.

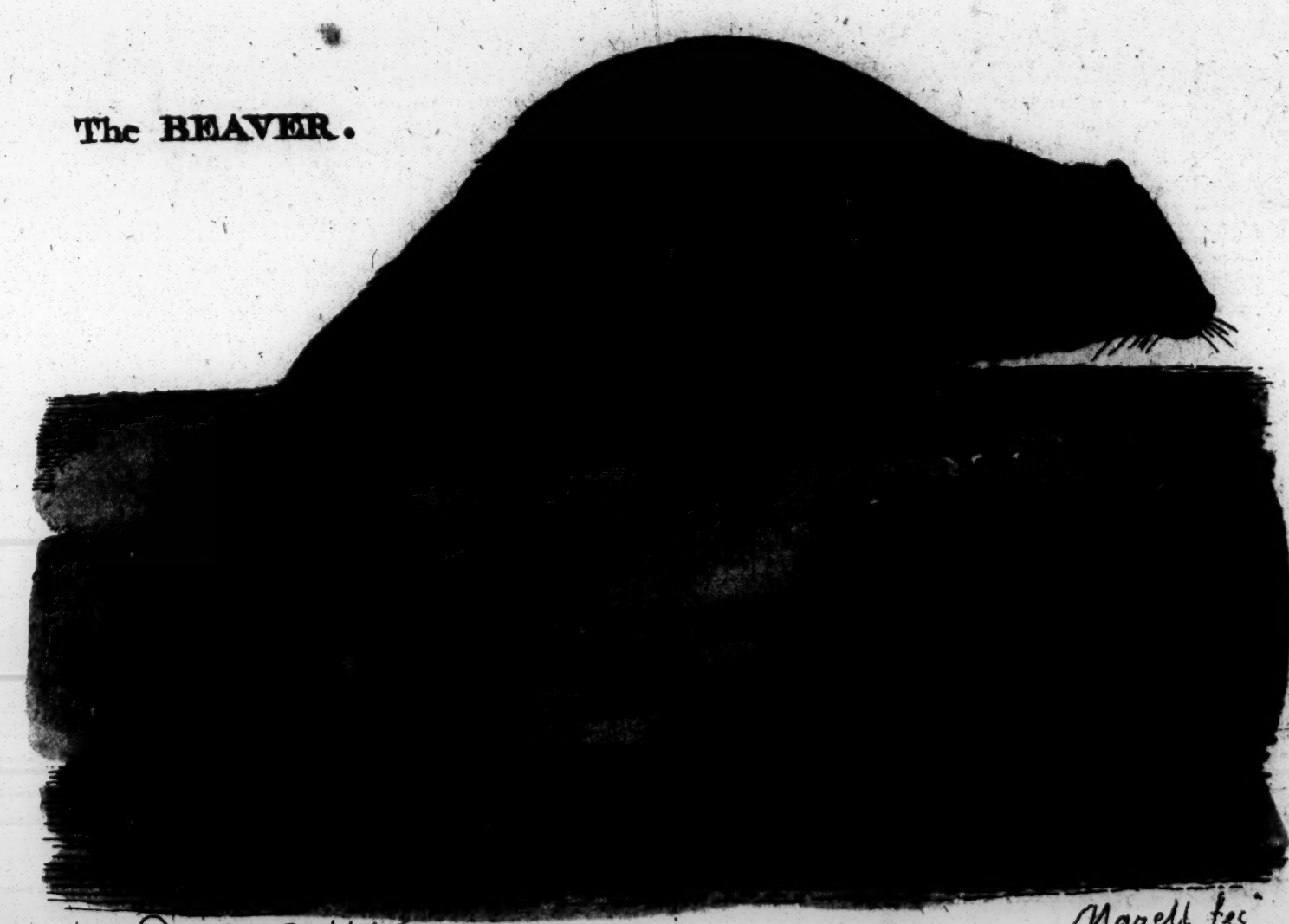
‡ *Lloſtlydan*, that is, the broad tailed animal. *Leges Wallicæ*, 261.

Genus



The MUSIMON. *P. 26.*

The BEAVER.



De Seve Del.

Mazell fec.

7 8 L

Genus I. The SEAL.

Species I. The SEAL.

Le Veau marin, ou loup de Mer. *Belon* 25. Pl. 26.
Seal, Seoile, or Sea-calf. Phoca, seu vitulus marinus. *Raii syn. quad.* 189.
Sea-calf. *Phil. transact.* No. 469. Tab. 1.
Smith's Kerry, 84, 364.
Borlase's Cornw. 284.
Worm. muse. 289.
Kassigiak. *Crantz's Hist. Greenl.* i. 123.
Le Phoque, *de Buffon.*
Horr. Icel. 88.
Pontop. Norw. ii. 125,
Brisson quad. 162.
Phoca vitulina. *Lin. syst.* 56.
Phoca. *Klein quad.* 93.
Phoca dentibus caninis tectis. *Faun. Suec.* 4.
Br. Zool. 34.

NAMES.

Brit.	Moelrhon	*Germ.*	Meer wolff, Meer hund
Fren.	Le Veau marin	*Dut.*	Zee hond
Ital.	Vechio marino	*Swed.*	Sial
Span.	Lobo marino	*Dan.*	Sæl hund

THE common length of the seals taken on the *British* coasts, is from five to six feet *.

The subject that we took our description from, was a young one; so allowance must be made for the proportions of the measurements of those that have attained their full size. Its length from the end of the nose, to the end of the hind feet, was two feet nine inches: to the end of the tail, two feet three inches: the head was seven inches long: the tail two and a half: the fore legs were deeply immersed in the skin of the body; what appeared out, was only eight

* Sir *R. Sibbald* says, that on the coast of *Angus*, some are found as large as oxen.

inches long: the breadth of the fore feet, when extended, was three inches and a half: the hind legs were placed in ſuch a manner as to point directly backwards; and were ten inches long: each hind foot, when extended, was nine inches and a half broad: every foot was divided into five toes; and each of thoſe connected by a ſtrong and broad web, covered on both ſides with ſhort hair.

The toes were furniſhed with ſtrong claws, well adapted to aſſiſt the animal in climbing the rocks it basked on: the claws on the hind feet were about an inch long, ſlender, and ſtrait; except at the ends, which were a little incurvated.

The circumference of the body in the thickeſt part, which was near the ſhoulders, was one foot ten inches; but near the hind legs, where it was narroweſt, it meaſured only twelve inches.

The head and noſe were broad and flat, like thoſe of the otter; the neck ſhort and thick; the eyes large and black; it had no external ears, but in lieu of them, two ſmall orifices: the noſtrils were oblong: on each ſide the noſe were ſeveral long ſtiff hairs; and above each eye, were a few of the ſame kind.

The form of the tongue of this animal is ſo ſingular, that were other notes wanting, that alone would diſtinguiſh it from all other quadrupeds; being forked, or ſlit at the end.

The whole animal was covered with ſhort hair, very cloſely ſet together: the color of that on the head and feet was duſky: on the body duſky, ſpotted irregularly with white: on the back the duſky color predominated; on the belly the white: but

ſeals

ſeals vary greatly in their marks and colors, and ſome have been found * entirely white. One that was taken near *Cheſter*, in *May* 1766, had on its firſt capture, the body naked like the ſkin of a porpeſe; and only the head and a ſmall ſpot beneath each fore leg, hairy; it was kept alive ſome time; but before it died, hair began to grow over the whole body †.

The ſeal is common on moſt of the rocky ſhores of *Great Britain* and *Ireland*, eſpecially on the northern coaſts: in *Wales* it frequents the coaſts of *Caernarvonſhire*, and *Angleſey*.

We muſt acknowledge the obligations we are under to the reverend Mr. *Farrington* of *Dinas*, in the former county, for ſeveral learned communications; but in particular for the natural hiſtory of this animal, which we ſhall give the public in his own words.

'The ſeals are natives of our coaſts; and are 'found moſt frequently between *Lleyn* in *Caernar-* 'vonſhire, and the northern parts of *Angleſey:* they are 'ſeen often towards *Carrig y moelrhon*, to the weſt of 'Bardſey, or *ynys Enlli*; and the *Skerries*, com- 'monly called in the *Britiſh* language *Ynys y moel-* 'rhoniad, or ſeal iſland. The *Latin* name of this am- 'phibious animal is *Phoca*: the vulgar name is ſea 'calf; and on that account, the male is called the 'bull, and the female the cow; but the *Celtic* appel- 'lative is *Moelrhon*, from the word *Moel*, bald, or 'without ears, and *Rhon*, a ſpear or lance.

* In the *Aſhmolean Muſeum* at *Oxford*, is a good picture of two white ſeals.

† *Vide*, The figure publiſhed in the additional plates of the folio edition of this work.

'They

'They are excellent ſwimmers, and ready divers, 'and are very bold when in the ſea; ſwimming care-'leſsly enough about boats: their dens or lodgments, 'are in hollow rocks, or caverns, near the ſea; but 'out of the reach of the tide: in the ſummer they 'will come out of the water, to baſk or ſleep in the 'ſun, on the top of large ſtones, or ſhivers of rocks: 'and that is the opportunity our countrymen take 'of ſhooting them; if they chance to eſcape, they 'haſten towards their proper element, flinging ſtones 'and dirt behind them, as they ſcramble along; at 'the ſame time expreſſing their fears by piteous 'moans; but if they happen to be overtaken, they 'will make a vigorous defence with their feet and 'teeth, till they are killed. They are taken for the 'ſake of their ſkins, and for the oyl their fat yields: 'the former ſell for four ſhillings, or four and ſix-'pence a piece; which, when dreſſed, are very uſeful 'in covering trunks, making waiſtcoats, ſhot 'pouches, and ſeveral other conveniencies. The 'fleſh of theſe animals, and even of porpeſes, for-'merly found a place at the tables of the great; as 'appears from the bill of fare of that vaſt feaſt that 'archbiſhop *Nevell* gave in the reign of *Edward* the 'fourth, in which is ſeen, that ſeveral were provided 'on the occaſion *. They couple about *April*, on 'large rocks, or ſmall iſlands, not remote from the 'ſhore; and bring forth in thoſe vaſt caverns that are 'frequent on our coaſts; they commonly bring two 'at a time, which in their infant ſtate, are covered 'with a whitiſh down, or woolly ſubſtance.'

* *Lelandi Collectanea.*

The

The natural hiſtory of this animal, may be further elucidated, by the following extracts from a letter of the reverend Dr. *William Borlaſe*, dated *October* the 24th, 1763.

'The ſeals are ſeen in the greateſt plenty on the 'ſhores of *Cornwall*, in the months of *May*, *June*, 'and *July*.

'They are of different ſizes, ſome as large as a 'moderate cow, and from that downwards to a ſmall 'calf.

'They feed on moſt ſorts of fiſh which they can 'maſter, and are ſeen ſearching for their prey near 'ſhore; where the whiſtling fiſh, wraws, and polacks 'reſort.

'They are very ſwift in their proper depth of 'water, dive like a ſhot, and in a trice riſe at fifty 'yards diſtance; ſo that weaker fiſhes cannot avoid 'their tyranny, except in ſhallow water: a perſon of 'the pariſh of *Sennan*, ſaw not long ſince a ſeal in-'purſuit of a mullet (that ſtrong and ſwift fiſh:) the 'ſeal turned it to and fro' in deep water, as a gre-'hound does a hare: the mullet at laſt found it had 'no way to eſcape, but by running into ſhoal water: 'the ſeal purſued; and the former to get more ſurely 'out of danger, threw itſelf on its ſide, by which 'means it darted into ſhoaler water than it could 'have ſwam in with the depth of its paunch and fins, 'and ſo eſcaped.

'The ſeal brings her young about the beginning 'of autumn; our fiſhermen have ſeen two ſucking 'their dam at the ſame time, as ſhe ſtood in the ſea 'in a perpendicular poſition.

'Their

'Their head in ſwimming is always above water, more ſo than that of a dog.

'They ſleep on rocks ſurrounded by the ſea, or on the leſs acceſſible parts of our clifts, left dry by the ebb of the tide; and if diſturbed by any thing, take care to tumble over the rocks into the ſea. They are extremely watchful, and never ſleep long without moving; ſeldom longer than a minute; then raiſe their heads, and if they hear or ſee nothing more than ordinary, lie down again, and ſo on, raiſing their heads a little, and reclining them alternately, in about a minute's time. Nature ſeems to have given them this precaution, as being unprovided with auricles, or external ears; and conſequently not hearing very quick, nor from any great diſtance.'

In Sir *R. Sibbald's* hiſtory of *Scotland*, we find an account of another ſpecies of the ſeal kind, which is copied from *Boethius*. The animal he mentions is the ſea-horſe, or *Morſe*: as this vaſt creature is found in the *Norwegian* ſeas, we think it not improbable but that it may have appeared on the *Scottiſh* coaſts; but having no better authority for it, than what is above-mentioned, we dare not give it a place in a *Britiſh Zoology*. The teeth of that animal, are as white and hard as ivory; but whether the ελεφάντινα ψάλια, ivory bits, which *Strabo* * mentions among the articles of the *Britiſh* commerce, were made of them, or the tooth of the *Narhwal*, or of ſome of the toothed whales, is not at this time eaſy to be determined.

* *Strabo, Lib.* iv. 200.

In

In this place it will be proper to add, that *Solinus* in his account of *Britain* informs us, that the fine gentlemen of our iſland adorned the hilts of their ſwords with the teeth of ſea beaſts, which were as white as ivory itſelf *.

Genus XII. The WEESEL.

Species I. The POLECAT.

Putorius. Polecat or Fitchet.
Raii ſyn. quad. 199.
Meyer's an. ii. Tab. 6.
Charlton ex. 20.
Geſner quad. 767.
Muſtela pilis in exortu ex cinereo albidis, colore nigricante terminatis, oris circumferentia alba. *Briſſon quad.* 180.
De Buffon, Tom. vii. 199. Tab. 23.
Muſtela putorius, *Lin. ſyſt.* 67.
Muſtela fœtida, *Klein quad.* 63.
Muſtela flaveſcente nigricans, ore albo, collari flaveſcente. *Faun. Suec.* 16.
Br. Zool. 37.

NAMES.

Brit.	Ffwlbard	*Germ.*	Ittiſ, ulk, Buntſing
Fren.	Le Putois	*Dut.*	Bonſing
Ital.	Foetta, Puzolo	*Swed.*	Iller
Span.	Putoro	*Dan.*	Ilder
Port.			

THE length of this animal, is about ſeventeen inches, excluſive of the tail; that of the tail ſix. The ſhape of this animal in particular, as well as of the whole genus, is long and ſlender; the noſe ſharp-pointed, and the legs ſhort: in fine, admirably formed for inſinuating itſelf into the ſmalleſt holes and paſſages, in ſearch of prey: it is very nimble and active, runs very faſt, will creep up the ſides

* *Polybiſtor*, 56.

of

of walls with greata gility, and ſpring with vaſt force: in running, the belly ſeems to touch the ground: in preparing to jump, it arches its back, which aſſiſts it greatly in that action.

The ears are ſhort, rounded and tipt with white: the circumference of the mouth, that is to ſay, the the ends of the lower and upper mandibles are white: the head, legs and thighs, are wholly of a deep chocolate color, almoſt black. The ſides are covered with hairs of two colors; the ends of which are of a blackiſh hue, like the other parts; the middle of a full tawny color.

The toes are long, and ſeparated to the very origin: the tail is covered with pretty long hair.

The Polecat is very deſtructive to young game of all kinds; and to poultry: they generally reſide in woods, or thick brakes; burroughing under ground, forming a ſhallow retreat, about two yards in length; which commonly ends, for its ſecurity, among the roots of ſome large trees: it will ſometimes lodge under hay-ricks, and in barns: in the winter it frequents houſes, and makes a common practice of robbing the dairy of the milk: it alſo makes great havoke in warrens.

It will bring five or ſix at a time; warreners aſſert, that the Polecat will mix with the ferret, and they are ſometimes obliged to procure an intercourſe between theſe animals to improve the breed of the latter, which by long confinement, will abate its ſavage nature; and become leſs eager after rabbets, and conſequently leſs uſeful. M. *de Buffon* denies that it will admit the polecat; yet gives the figure of a variety

under

under the name of the *Ferret Polecat* *, which has much the appearance of being a ſpurious offspring. The Ferret agrees with the polecat in many reſpects, particularly in its thirſt after the blood of rabbets. It may be added, that the Ferret comes originally from *Africa* †; and is only cultivated in *Great Britain*.

Though the ſmell of the polecat, when alive, is rank and diſagreeable, even to a proverb; yet the ſkin is dreſt with the hair on, and uſed as other furs for tippets, *&c.* and is alſo ſent abroad to line cloaths.

Species II. The MARTIN.

Martes, alias Foyna. The Martin and Martlet. *Raii ſyn. quad.* 200.
Meyer's an. ii. Tab. 4.
Martin, or Martern. *Charlton exer.* 20. The Mertrick. *Martin's Weſt. Iſles*, 36.
Geſner quad. 764.
Muſtela pilis in exortu albidis caſtaneo colore terminatis veſtita, gutture albo. *Briſſon quad.* 178.
De Buffon, Tom. vii. 161. Tab. 18.
Muſtela martes. *Lin. ſyſt.* 67.
M. Martes. *Klein quad.* 64.
M. fulvo-nigricans gula pallida. *Faun. Suec.* 15.
Br. Zool. 38.

NAMES.

Brit. Bela graig
Fren. La Fouine
Ital. Foina, Fouina
Span. Marta, Gibellina
Germ. Huhſs marder, ſtein marder
Dut. Marter
Swed. Mard
Dan. Maar.

THIS is the moſt beautiful of the *Britiſh* beaſts of prey: its head is ſmall, and elegantly formed: its eyes lively: and all it motions ſhew great

* *La Furet Putois*, Tom. vii. Tab. 25.

† Καὶ γάλας αγρίας ἂς ἡ λυβύη φιρει. *Strabo, Lib.* iii. p. 144. *Edit. Caſaubon.*

grace, as well as agility: when taken young, it is eaſily tamed, is extremely playful, and in conſtant good humour: nature will recur, if it gets looſe; for it will immediately take advantage of its liberty, and retire to its proper haunts. It makes great havoke among poultry, game, &c. and will eat mice, rats, and moles. With us it inhabits woods, and makes its lodge in the hollows of trees; and brings from four to ſix young at a time.

The martin is about eighteen inches long; the tail ten, or, if the meaſurement be taken to the end of the hair at the point, twelve inches.

The ears are broad, rounded and open: the back, ſides, and tail, are covered with a fine thick down, and with long hair intermixed: the bottom is aſh-colored: the middle of a bright cheſnut color: the tips black: the head brown, with ſome ſlight caſt of red: the legs and upper ſides of the feet are of a chocolate color: the palms, or under ſides are covered with thick down like that on the body: the feet are broad: the claws white, large and ſharp; well adapted for climbing trees, which in this country are its conſtant reſidence. The throat and breaſt are white: the belly of the ſame color with the back, but rather paler: the hair on the tail is very long; eſpecially at the end, where it appears much thicker than near the origin of it: the hair in that part is alſo darker. But martins vary in their colors, inclining more or leſs to aſh-color, according to their ages or the ſeaſons they are taken in.

The ſkin and excrements of this animal, have a fine muſky ſcent; and are entirely free of that rankneſs

neſs which diſtinguiſhes the other ſpecies of this genus; the ſkin is a valuable fur; and much uſed for linings to the gowns of magiſtrates.

Species III. The Yellow Breaſted Martin.

Martes abietum. *Raii ſyn. quad.* 200.
Meyer's an. ii. Tab. 5.
Martes ſylveſtris. *Geſner quad.* 765.
Muſtela pilis in exortu ex cinereo albidis caſtaneo colore terminatis veſtita, gutture flavo. *Briſſon quad.* 179.
De Buffon, Tom. vii. 186. Tab. 22.
Br. Zool. 39.

NAMES.

Brit.	Bela goed	*Port.*	
Fren.	La Marte	*Germ.*	Feld-marder, wild-marder
Ital.	Marta, Martura, Martora, Martorello	*Dut.*	Marter
Span.	Marta	*Swed.*	

THIS ſpecies is found in *Great Britain*; but is much leſs common in *England* than the former; it is ſometimes taken in the counties of *Merioneth* and *Caernarvon*; where it is diſtinguiſhed from the other kind, by the name of *bela goed*, or wood martin, it being ſuppoſed entirely to inhabit the woods; the *bela graig* to dwell only among the rocks. Tho' this is ſo rare in theſe parts, yet in *Scotland* it is the only kind; where it inhabits the fir foreſts, building its neſt at the top of the trees *. It loves a cold climate, and is found in much greater numbers in the north of *Europe*, than in the other parts. *North America* abounds with theſe animals. Prodigious numbers of

* Vide *Sibbald's Hiſt. Scot.* part ii. lib. iii. p. 11.

their ſkins are annually imported from *Hudſon's-bay* and *Canada*. In one of the company's ſales * not fewer than 12,370 good ſkins, and 2360 damaged ones were ſold, and about the ſame time, the *French* brought into the port of *Rochelle* from *Canada*, not leſs than 30,325.

The principal differences between this and the former kind, conſiſt in the ſize, this being leſs: the breaſt too is yellow; the color of the body much darker, and the fur in general greatly ſuperior in fineneſs, beauty, and value.

Species IV. The WEESEL.

The Weaſel or Weeſel. Muſtela vulgaris: in *Yorkſhire*, the Fitchet or Foumart. *Raii ſyn. quad.* 195.
Girald. Cambrenſ. 149.
The Whitred. *Sib. Scot.* 11.
Muſtela ſupra rutila, infra alba. *Briſſon quad.* 173.
De Buffon, Tom. vii. 235. Tab. 29.
Geſner quad. 753.
Muſtela vulgaris. *Klein quad.* 62.
Br. Zool. 39.

NAMES.

Brit.	Bronwen	*Germ.*	Wiſel
Fren.	La Belette	*Dut.*	Weezel
Ital.	Donnola, Ballottula, Benula	*Swed.*	Veſla
		Port.	Doninha
Span.	Comadreia	*Dan.*	Væſel

THIS ſpecies is the leaſt of the weeſel kind, the length of the head and body not exceeding ſix, or at moſt ſeven inches. The tail is only two inches and a half long, and ends in a point: the ears are large; and the lower parts of them are doubled in.

* In 1743. Vide *Dobbs's* account of *Hudſon's-bay*, 200.

The whole upper part of the body, the head, tail, legs, and feet are of a very pale tawny brown. The whole under ſide of the body from the chin to the tail is white; but beneath the corners of the mouth on each jaw is a ſpot of brown.

This, like the reſt of the kind, is very deſtructive to young birds, poultry, and young rabbets; and beſides a great devourer of eggs. It does not eat its prey on the place, but after killing it, by one bite near the head, carries it off to its young, or its retreat. It is a remarkably active animal, and will run up the ſides of walls with ſuch facility, that ſcarce any place is ſecure from it; and its body is ſo ſmall, that there is ſcarce any hole but what is pervious to it. This ſpecies is much more domeſtic than the others; frequenting out-houſes, barns, and grainaries; where, to make as it were ſome atonement for its depredations among our tame fowl, it ſoon clears its haunts from rats and mice, being infinitely more an enemy to them than the cat itſelf. It brings five or ſix young at a time: its ſkin and excrements are moſt intolerably fetid.

This animal is confounded by *Linnæus* with the Stoat or Ermine. He ſeems unacquainted with our weeſel in its brown color, but deſcribes it in the white ſtate under the title of *Snomus*, or *Muſtela nivalis* *.

* *Similima* Ermineo *ſed dimidio minor, caudæ apice pilo vix uno alterove albo.* *Faun. Suec.* No. 18. *Syſt. Nat.* 69.

SPECIES V.

When brown, the STOAT.

When white, the ERMINE.

Muſtela candida, animal ermineum. *Raii ſyn. quad.* 198. *Mort. Northampt.* 442. *Meyer's an.* ii. Tab. 23, 24.
Muſtela hieme alba, æſtate ſupra rutila infra alba, caudæ apice nigro. *Briſſon quad.* 176. *De Buffon*, vii. 240. *Tab.* 29. *Fig.* 2. *Tab.* 31. *Fig.* 1. *Geſner quad.* 753.
Muſtela erminea. M. plantis fiſſis, caudæ apice atro. *Lin. ſyſt.* 68. *Faun. Suec.* 17. *Pontop. Norway. Part* ii. p. 25. *Br. Zool.* 40.

NAMES.

Brit.	Carlwm	*Germ.*	Hermelin
Fren.	L'Hermine, Le Roſelet	*Swed.*	Hermelin, Lekatt
Ital.	Armellino	*Dut.*	Hermilyn
Span.	Armino, Armelina	*Dan.*	Hermelin, Lekat

THE length of the ſtoat to the origin of the tail, is ten inches: that of the tail is five inches and a half. The colors bear ſo near a reſemblance to thoſe of the weeſel, as to cauſe them to be confounded together by the generality of common obſervers; the weeſel being uſually miſtaken for a ſmall ſtoat: but theſe animals have evident and invariable ſpecific differences, by which they may be eaſily known. Firſt, by the ſize; the weeſel being ever leſs than the ſtoat; ſecondly, the tail of the latter is always tipt with black, is longer in proportion to the bulk of the animal, and more hairy; whereas the tail of the weeſel is ſhorter, and of the ſame color with the body: thirdly,

thirdly, the edges of the ears, and the ends of the toes in this animal, are of a yellowiſh white. It may be added, that the ſtoat haunts woods, hedges and meadows; eſpecially where there are brooks, whoſe ſides are covered with ſmall buſhes; and ſometimes (but leſs frequently than the weeſel) inhabits barns, and other buildings.

In the moſt northern parts of *Europe*, theſe animals regularly change their color in winter; and become totally white, except the end of the tail, which continues invariably black. The ſkins and tails are a very valuable article of commerce in *Norway*, *Lapland*, *Ruſſia*, and other cold countries; where they are found in prodigious numbers. They are alſo very common in *Kamtſchatka* and *Siberia* *. In *Siberia* they burrough in the fields, and are taken in traps baited with fleſh. In *Norway* † they are either ſhot with blunt arrows, or taken in traps made of two flat ſtones, one being propped up with a ſtick, to which is faſtened a baited ſtring, which when the animals nibble, the ſtone falls down and cruſhes them to death. The *Laplanders* take them in the ſame manner, only inſtead of ſtones make uſe of two logs of wood ‡. The ſtoat is ſometimes found white in *Great Britain*, but not frequently; and then it is called a white weeſel. That animal is alſo found white; but may be eaſily diſtinguiſhed from the other in the ermine ſtate, by the tail, which in the weeſel is of a light tawny brown. With us the former is obſerved to

* *Bell's Travels*, i. 199. † *Hiſt. Norway*, ii. 25.
‡ *Oeuvres de Maupertuis*, iii. 187.

begin to change its color from brown to white in *November*, and to begin to reſume the brown the beginning of *March* *.

The natural hiſtory of this creature is much the ſame with that of the weeſel, its food being birds, rabbets, mice, *&c.* its agility the ſame, and its ſcent equally fetid: it is much more common in *England* than that animal.

Sir *Robert Sibbald* mentions an animal, which he ſays is common in *Caithneſs*, called there *Lavellan*: by his deſcription it ſeems to belong to this genus. He ſays it lives in the water, has the head of the weeſel, and reſembles that creature in color: and that its breath is prejudicial to cattle. *Sib. Hiſt. Scot.* 11.

* *Ph. Tr.* No. 337.

Genus

Genus XIII. The HARE.

Species I. The HARE.

Lepus Plinii, lib. viii. c. 55.
The Hare. *Rati ſyn. quad.* 204.
White Hare. *Mort. Northampt.* 445.
Sib. Scot. 11.
Meyer's an. ii. Tab. 32.
Geſner quad. 605.
Lepus caudatus ex cinereo rufus. *Briſſon quad.* 94.
De Buffon, Tom. vi. 246. Tab. 38.
Lepus timidus. *Lin. ſyſt.* 77.
Lepus cauda abrupta pupillis atris. *Faun. Suec.* 25.
Lepus vulgaris cinereus. *Klein quad.* 51.
Br. Zool. 41.

NAMES.

Brit.	Yſgyfarnog, Ceinach	*Germ.*	Has, Haas
Fren.	Le Lievre	*Dut.*	Haas
Ital.	Lepre, Lievora	*Swed.*	Hare
Span.	Liebre	*Dan.*	Hare
Port.	Lebre		

TO enter on a minute deſcription of ſo well known an animal, would be to abuſe the reader's patience; yet to neglect pointing out the admirable contrivance of its ſeveral properties and parts, would be fruſtrating the chief deſign of this work: that of pointing out the divine wiſdom in the animal world.

Being a weak and moſt defenceleſs creature, it is endued, in a very diſtinguiſhed degree with that preſerving paſſion, fear: this makes it perpetually attentive to every alarm, and keeps it always lean.

To enable it to receive the moſt diſtant notices of dangers, it is provided with very long ears, which (like the tubes made uſe of by the deaf) convey to it the remoteſt ſounds.

Its eyes are very large and prominent, adapted to receive the rays of light, on all ſides.

To aſſiſt it to eſcape its purſuers by a ſpeedy flight, the hind legs are formed remarkably long, and furniſhed with ſtrong muſcles: their length give the hare ſingular advantages over its enemies in aſcending ſteep places; and ſo ſenſible is the animal of this, as always to make towards the riſing ground when ſtarted.

The various ſtratagems and doubles it uſes, when hunted, are ſo well known to every ſportſman, as not to deſerve mention; except to awaken their attention to thoſe faculties nature has endowed it with; which ſerve at the ſame time to increaſe their amuſement, as well as to prevent the animal's deſtruction.

It very rarely leaves its form or ſeat in the day; but in the night takes a circuit in ſearch of food, always returning through the ſame meuſes, or paſſes.

The color approaches very near to that of the ground; which ſecures it more effectually from the ſight of men, and of beaſts and birds of prey. Providence has been ſo careful in reſpect to the preſervation of the ſpecies of animals, as to cauſe in northern countries theſe as well as many others to change color, and become white at the beginning of winter; to render them leſs conſpicuous amidſt the ſnow. Accidental inſtances of white hares, are met with in *Great-Britain.*

Its food is entirely vegetable; and it does great injury to nurſeries of young trees, by eating the bark off: it is particularly fond of pinks, parſley, and

ch.

The

The hare never pairs; but in the rutting ſeaſon, which begins in *February*, the male purſues and diſcovers the female, by the ſagacity of its noſe. The female goes with young one month, brings uſually two young at a time; ſometimes three, and very rarely four. Sir *Thomas Brown*, in his treatiſe on vulgar errors *, aſſerts the doctrine of ſuperfetation; i. e. a conception upon conception, or an improvement on the firſt fruit before the ſecond is excluded; and he brings this animal as an inſtance; aſſerting, from his own obſervation, that after the firſt caſt there remain ſucceſſive conceptions, and other younglings very immature, and far from the term of their excluſion; but as the hare breeds very frequently in the year, there is no neceſſity of having recourſe to this accident † to account for their numbers.

Hares are very ſubject to fleas; *Linnæus* tells us, that the *Dalecarlians* make a ſort of cloth of the fur, called *filt*; which, by attracting thoſe inſects, preſerves the wearer from their troubleſome attacks ‡.

The hair of this creature forms a great article in the hat manufacture; and as this country cannot ſupply a ſufficient number, vaſt quantities are annually imported from *Ruſſia* and *Siberia*. In the latter ‖ they collect in great troops of four or five hundred, and during winter are white as the ſnow they tread on. They are caught in toils for the ſake of their

* P. 118.

† For a farther account of this doctrine, we refer the curious reader to M. *Buffon's* works, vol. vi. p. 252, 279, &c.

‡ *Faun. Suec.* 25. ‖ *Bell's Travels*, i. 200. 238.

ſkins,

ſkins, which are ſo cheap, as to be ſold on the ſpot for a ruble and a half, or *6s. 9d. per* hundred *.

The hare was reckoned a great delicacy among the *Romans* †; the *Britains*, on the contrary, thought it impious even to taſte it ‡; yet this animal was cultivated by them; either for the pleaſure of the chace; or for the purpoſes of ſuperſtition, as we are informed that *Boadicia*, immediately before her laſt conflict with the *Romans*, let looſe a hare ſhe had concealed in her boſom, which taking what was deemed a fortunate courſe, animated her ſoldiers by the omen of an eaſy victory over a timid enemy ‖.

Species II. The RABBET.

Cuniculus. The Rabbet, or Cony. *Raii ſyn. quad.* 205. *Meyer's an.* i. *Tab.* 83. *Geſner quad.* 362. Lepus caudatus, obſcure cinereus. *Briſſon quad.* 95. *De Buffon, Tom.* vi. 303. Tab. 50, 51. Lepus cuniculus. *Lin. ſyſt.* 77. Lepus cauda breviſſima papillis rubris. *Faun. Suec.* 26. Cuniculus terram fodiens. *Klein quad.* 52. *Br. Zool.* 43.

NAMES.

Brit.	Cwningen	*Ger.*	Kunigle, Kunele, Kunlein
Fren.	Le Lapin	*Dut.*	Konyn
Ital.	Coniglio	*Swed.*	Kanin
Span.	Conejo	*Dan.*	Kanine
Port.	Coelho		

IT is well obſerved by *Pliny*, that nature ‘ hath ‘ ſhewed great kindneſs, in cauſing thoſe things

* *Strahlenberg's Diſc. Ruſſia*, &c. 370.

† Inter aves turdus, ſi quid me judice verum eſt:
Inter quadrupedes gloria prima Lepus eſt. *Martial.* 13. 92.

‡ *Leporem et gallinam et anſerem guſtare fas non putant: hæc tamen alunt, animi voluptatiſque cauſa.* Cæſar. Com. lib. v.

‖ Ταυτα ει πθξα λαγων μεν εκ τθ κολπθ, &c. *Xiphilini Epitome Dioniſ.* 173.

‘ to

‘ to be moſt prolific, that are the moſt harmleſs and ‘ and the propereſt for our food *.

This excellent obſervation of his, cannot be better illuſtrated than in ſhewing the great fruitfulneſs of this animal; as it far exceeds that proof, brought by the ingenious author of the œconomy of nature, in ſupport of the ſame quotation. The inſtance he produces is the pigeon; whoſe increaſe, from one pair, may in four years amount to 14,760 †: but rabbets will breed ſeven times a year, and bring eight young ones each time: on a ſuppoſition this happens regularly, during four years, their numbers will amount to 1,274,840.

By this account, we might juſtly apprehend being overſtocked with theſe animals, if they had not a large number of enemies which prevents the too great increaſe: not only men, but hawks, and beaſts of prey, make dreadful havoke among the ſpecies. Notwithſtanding theſe different enemies, we are told by *Pliny*, and *Strabo*, that they once proved ſo great a nuiſance to the inhabitants of the *Balearic* iſlands, that they were obliged to implore the aſſiſtance of a military force from the *Romans*, in the time of *Auguſtus*, in order to extirpate them ‡. Their native country is *Spain*, where they were taken by means of ferrets, as we do at preſent, which animals were firſt introduced there out of *Africa* §: they love a temperate and a warm climate, and are incapable of

* *Benigna circa hoc natura, innocua et eſculenta animalia fœcunda generavit.* Lib. viii. c. 55.

† Vide *Swediſh* Eſſays, tranſlated by Mr. *Stillingfleet*, Ed. 1ſt. p. 75.

‡ *Plin.* lib. viii. c. 55. *Strabo*, lib. iii. § *Strabo*, iii. 144.

bearing

bearing great cold, ſo that in *Sweden* * they are obliged to be kept in houſes. Our country abounds with them; their furs form a conſiderable article in the hat manufactures; and of late, ſuch part of the fur as is unfit for that purpoſe, has been found as good as feathers for ſtuffing beds and bolſters. Numbers of the ſkins are annually exported into *China*. The *Engliſh* counties that are moſt noted for theſe animals are *Lincolnſhire*, *Norfolk*, and *Cambridgeſhire*. *Methold*, in the laſt county, is famous for the beſt ſort for the table: the ſoil there is ſandy, and full of moſſes and the *Carex* graſs.

Formerly the ſilver-haired rabbets were in great eſteem for lining of cloaths, and their ſkins ſold at three ſhillings a piece †; but ſince the introduction of the more elegant furs, the price is fallen to ſixpence each. The *Sunk Iſland* ‡ in the *Humber* was once famous for a mouſe-colored ſpecies, now extirpated by reaſon of the injury it did to the banks by burroughing.

* *Faun. Suec.* 26.
‡ *Pb. tr.* No. 361.
† *Hartlib's Legacy.*

Genus

Genus XIV. The SQUIRREL.

Species I. The SQUIRREL.

Sciurus vulgaris. *Raii syn. quad.* 214.
Meyer's an. i. Tab. 97.
Gesner quad. 845.
Sciurus rufus, quandoque griseo admixto. *Brisson quad.* 104.
De Buffon, Tom. vii. 258. *Tab.* 32.
Sciurus auriculis apice barbatis, palmis 4-dactylis plantis 5-dactylis. *Lin. syst.* 86.
Sciurus palmis solis saliens. *Faun. Suec.* 37.
Sc. vulgaris rubicundus. *Klein quad.* 53.
Br. Zool. 44.

NAMES.

Brit.	Gwiwair	*Port.*	Ciuro
Fren.	L'Ecureuil	*Germ.*	Eychorn, Eichmermlin
Ital.	Scoiattolo, Schiarro, Schiratto	*Dut.*	Inkhoorn
Span.	Harda, Hardilla, Esquilo	*Swed.*	Ikorn, graskin
		Dan.	Ekorn

THE squirrel derives its name from the form of of its tail, a σκια a shade, ουρα a tail, as serving this little animal for an umbrella. That part is long enough to cover the whole body, and is clothed with long hairs, disposed on each side horizontally, which gives it a great breadth. These serve a double purpose; when erected, they prove a secure protection from the injuries of heat or cold; when extended, they are very instrumental in promoting those vast leaps the squirrel takes from tree to tree. On the authority of *Klein* and *Linnæus*, we may add a third application of the form of the tail: these naturalists tell us, that when the squirrel is disposed to cross a river, a piece of bark is the boat, the tail the sail.

This animal is remarkably neat, lively, active, and pro-

provident, never leaves its food to chance; but ſecures in ſome hollow tree a vaſt magazine of nuts for winter proviſion. In the ſummer it feeds on the buds and young ſhoots; and is particularly fond of thoſe of the fir and pine, and alſo of the young cones. It makes its neſt of moſs or dry leaves, between the fork of two branches; and brings four or five young at a time. Squirrels are in heat early in the ſpring, when it is very diverting to ſee the female feigning an eſcape from the purſuit of two or three males, to obſerve the various proofs they give of their agility, which is then exerted in full force.

The color of the whole head, body, tail, and legs of this animal, is a bright reddiſh brown: the belly and breaſt white: in ſome parts of *Wales* there is a variety of the ſquirrel kind, with a creme-colored tail: the ears are very beautifully ornamented with long tufts of hair, of a deeper color than thoſe on the body: the eyes are large, black, and lively: the fore teeth, ſtrong, ſharp, and well adapted to its food: the legs are ſhort and muſcular: the toes long, and divided to their origin; the nails ſtrong and ſharp; in ſhort, in all reſpects fitted for climbing, or clinging to the ſmalleſt boughs: on the fore-feet it has only four toes, with a claw in the place of the thumb or interior toe: on the hind feet there are fiye toes.

When it eats or dreſſes itſelf, it ſits erect, covering the body with its tail, and making uſe of the fore-legs as hands. It is obſerved, that the gullet of this animal is very narrow, to prevent it from diſgorging its food, in deſcending of trees, or in down leaps.

Genus

Genus XV. The DORMOUSE.

Species I. The DORMOUSE.

Mus avellanarum minor. The Dormouſe or Sleeper. *Raii ſyn. quad.* 220.
The Dormouſe. *Edw.* 266. *Geſner quad.* 162.
Glis ſupra rufus infra albicans. *Briſſon quad.* 115.
De Buffon, Tom. viii. 193. *Tab.* 26.
Mus avellanarius. *Lin. ſyſt.* 83.
Mus cauda longa piloſa corpore rufo gula albicante. *Faun. Suec.* 35.
Br. Zool. 45.

NAMES.

Brit. Pathew
Fren. Le Muſcardin, Croque-noix, Rat-dor
Ital. Moſcardino
Span. Liron
Germ. Rothe, Wald-mans
Swed. Skogſmus
Dan. Kaſſel-muus

THIS animal agrees with the ſquirrel in its food, reſidence, and ſome of its actions; on firſt ſight it bears a general reſemblance to it; but on a cloſer inſpection, ſuch a difference may be diſcovered in its ſeveral parts, as vindicates M. *Briſſon*, for forming a diſtinct genus of the Dormice, or *Glires*. Theſe want the fifth claw on the interior ſide of their fore-feet; nor are their ears adorned with thoſe elegant tufts of hair that diſtinguiſh the ſquirrel kind: their tail is ſo covered with hair, as to appear perfectly round; while that of the ſquirrel appears flat. Theſe diſtinctions prevail in the other ſpecies, ſuch as the *Lerot* and *Loir*.

Dormice inhabit woods, or very thick hedges; forming their neſts in the hollow of ſome low tree, or near

or near the bottom of a close shrub: as they want much of the sprightliness of the squirrel, they never aspire to the tops of trees; or, like it, attempt to bound from spray to spray: like the squirrel they form little magazines of nuts, *&c.* for winter provision; and take their food in the same manner, and same upright posture. The consumption of their hoard during the rigor of the season is but small: for they sleep most part of the time; retiring into their holes at the first approach of winter, they roll themselves up, and lie almost torpid the greatest part of that gloomy season. In that space, they sometimes experience a short revival, in a warm sunny day; when they take a little food, and then relapse into their former state.

The size of the dormouse is equal to that of a mouse; but has a plumper appearance, and the nose is more blunt; the eyes are large, black, and prominent; the ears broad, rounded, thin, and semi-transparent: the forefeet are furnished with four toes; the hind feet with five; but the interior toes of the hind feet are destitute of nails: the tail is about two inches and a half long, closely covered on every side with hair: the head, back, sides, belly, and tail, are of a tawny red color; the throat white.

These animals seldom appear far from their retreats; or in any open place; for which reason they seem less common in *England* than they really are. They make their nests of grass, moss, and dead leaves; and bring usually three or four young at a time.

Genus

Genus XVI. The RAT.

Species I. The Common RAT.

Mus domeſticus major, ſeu Rattus. *Raii ſyn. quad.* 217. *Meyer's an.* ii. Tab. 83. *Geſner quad.* 731.

Mus cauda longiſſima obſcure cinereus. *Briſſon quad.* 118. *De Buffon, Tom.* vii. p. 278. *Tab.* 36.

Mus rattus. *Lin. ſyſt.* 83.

Mus cauda longa ſubnuda corpore fuſco cinereſcente. *Faun. Suec.* 33.

Mus Rattus, mus ciſtrinarius. *Klein quad.* 57. *Br. Zool.* 46.

NAMES.

Brit.	Llygoden ffrengig	*Germ.*	Ratz
Fren.	Le Rat	*Dut.*	Rot
Ital.	Ratto, Sorcio	*Swed.*	Rotta
Span.	Raton, Rata	*Dan.*	Rotte
Port.	Rato		

THE rat is the moſt pernicious of any of our ſmaller quadrupeds: our meat, corn, paper, cloaths, furniture, in ſhort every conveniency of life is a prey to this deſtructive creature: nor does it confine itſelf to theſe; but will make equal havoke among our poultry, rabbets, or young game. Unfortunately for us it is a domeſtic animal, always reſiding in houſes, barns, or grainaries; and nature has furniſhed it with fore-teeth of ſuch ſtrength, as enable it to force its way through the hardeſt wood, or oldeſt morter. It makes a lodge, either for its days reſidence, or for a neſt for its young, near a chimney; and improves the warmth of it, by forming there a magazine of wool, bits of cloth, hay or

ſtraw. It breeds frequently in the year, and brings about ſix or ſeven young at a time: this ſpecies increaſes ſo faſt, as to over-ſtock their abode: which often forces them, through deficiency of food, to devour one another: this unnatural diſpoſition happily prevents even the human race from becoming a prey to them; not but that there are inſtances of their gnawing the extremities of infants in their ſleep.

The greateſt enemy the rats have is the weeſel; which makes infinitely more havoke among them than the cat; for the weeſel is not only endowed with ſuperior agility; but, from the form of its body, can purſue them through all their retreats that are impervious to the former. The *Norway* rat has alſo greatly leſſened their numbers, and in many places almoſt extirpated them: this will apologize for a brief deſcription of an animal once ſo well known. Its length from the noſe to the origin of the tail, is ſeven inches: the tail is near eight inches long: the noſe is ſharp-pointed, and furniſhed with long whiſkers: the colour of the head and whole upper part of the body is a deep iron-grey, bordering on black; the belly is of a dirty cinereous hue; the legs are of a duſky color, and almoſt naked: the fore-feet want the thumb or interior toe, having only in its place a claw: the hind-feet are furniſhed with five toes.

Among other officers, his *Britiſh* majeſty has a *rat-catcher*, diſtinguiſhed by a particular dreſs, ſcarlet embroidered with yellow worſted, in which are figures of mice deſtroying wheat-ſheaves.

Species

Species II. The *Norway* RAT.

Mus ſylveſtris, Rat de bois. *Briſſon quad.* 20.
Le Surmulot. *De Buffon, Tom.* viii. 206. Tab. 27.
Mus norvegicus. *Klein quad.* 56.
Mus ex norvegia. *Seb. Mus. Tom.* ii. 64. Tab. 63.
Br. Zool. 47.

THIS is a very large ſpecies; thicker, and of a ſtronger make than the common rat: the length from the end of the noſe to the beginning of the tail, is nine inches; the length of the tail the ſame; the uſual weight eleven ounces: the ears reſemble thoſe of the rat: the eyes large and black: the color of the head and whole upper part of the body is a light brown, mixed with tawny and aſh-color: the end of the noſe, the throat and belly, are of a dirty white, inclining to grey: the feet and legs almoſt bare; and of a dirty, pale, fleſh-color: the beginning of the tail is of the ſame color as the back; the reſt of the tail is covered with minute duſky ſcales, mixed with a few hairs.

This is the ſpecies well known in this kingdom under the name of the *Norway* rat; but it is an animal quite unknown in *Scandinavia*, as we have been aſſured by ſeveral natives of the countries that form that tract: and *Linnæus* * takes no notice of it in his laſt ſyſtem. It is fit here to remark an error that gentleman has adopted in ſpeaking of the common rat, which he ſays was firſt brought from *America* into *Europe* by means of a ſhip from *Antwerp*. The fact is,

* *Lin. ſyſt.* 83.

that both rat and mouſe were unknown to the new world before it was diſcovered by the *Europeans*, and the firſt rats it ever knew, were introduced there by a ſhip from *Antwerp* *. This animal never made its appearance in *England* till about forty years ago †. It has quite extirpated the common kind wherever it has taken its reſidence; and it is to be feared that we ſhall ſcarce find any benefit by the change; the *Norway* rat having the ſame diſpoſition, with greater abilities of doing miſchief, than the common kind. This ſpecies burroughs, like the water rat, in the banks of rivers, ponds and ditches; it takes the water very readily; and ſwims, and dives with great celerity: like the black ſpecies, it preys on rabbets, poultry, and all kind of game; and on grain and fruits. It increaſes moſt amazingly faſt, producing from fourteen to eighteen young at a time. Its bite is not only ſevere, but dangerous; the wound being immediately attended with a great ſwelling, and is a long time in healing. Theſe rats are ſo bold, as ſometimes to turn on thoſe that purſue them, and faſten on the ſtick or hand of ſuch as offer to ſtrike them.

M. *Briſſon* deſcribes this ſame animal twice under different names, p. 170. under the title of *le rat du bois*; and again, p. 173. under that of *le rat de norvege*. M. *de Buffon* ſtiles it *le Surmulot*; as reſembling the mulots, or field mice, in many reſpects; but exceeding them in bulk.

* *Ovalle's Hiſt. of Chile in Churchill's Voy.* iii. 43.

† This ſpecies reached the neighbourhood of *Paris*, about ſeventeen years ago.

Species

Species III. The WATER RAT.

Le Rat d'Eau, *Belon* 30. *pl.* 31.
Mus major aquaticus, ſeu Rattus aquaticus. *Raii ſyn. quad.* 217.
Sorex aquaticus. *Charlton ex*: 25.
Meyer's ann. ii. *Tab.* 84.
Mus cauda longa pilis ſupra ex nigro et flaveſcente mixtis, infra cinereis veſtitus. *Briſſon quad.* 124.
De Buffon, Tom. vii. 348. *Tab.* 43.
Mus amphibius. Mus cauda elongata piloſa plantis palmatis. *Lin. ſyſt.* 82.
Caſtor cauda lineari tereti. *Faun. Suec.* 25. *Ed.* 1. Mus amphibius 32. *Ed.* 2.
Mus aquatilis. *Klein quad.* 57. *Br. Zool.* 48.

NAMES.

Brit.	Llygoden y dwfr	*Germ.*	Waſſer maus, W. Ratz
Fren.	Le Rat d'eau	*Dut.*	Water-rot
Ital.	Sorgo morgange	*Swed.*	Watn-ratta
Span.		*Dan.*	Vand-rotte
Port.			

LINNÆUS, from the external appearance of this animal, has in one of his ſyſtems placed it in the ſame genus with the beaver. The form of the head, the ſhortneſs of the ears, and the thickneſs of the fur, and the places it haunts, vindicate in ſome degree the opinion that naturaliſt was at that time of: but the form of the tail is ſo different from that of the beaver, as to oblige him to reſtore the water rat to the claſs he found it, in the ſyſtem of our illuſtrious countryman *Ray*.

The water-rat never frequents houſes; but is always found on the banks of rivers, ditches and ponds, where it burroughs and breeds. It feeds on ſmall fiſh, or the fry of greater; on frogs, inſects, and ſometimes on roots; it has a fiſhy taſte; and in ſome

countries is eaten; M. *Buffon* informing us that the peaſants in *France* eat it on maigre days.

It ſwims and dives admirably well, and continues long under water, though the toes are divided like thoſe of the common rat; not connected by membranes, as Mr. *Ray* imagined; and as *Linnæus*, and other writers, relate after him.

The male weighs about nine ounces; the length ſeven inches from the end of the noſe to the tail; the tail five inches: on each foot are five toes, the inner toe of the fore-foot is very ſmall; the firſt joint of the latter is very flexible, which muſt aſſiſt it greatly in ſwimming, and forming its retreat. The head is large, the ears ſmall, and ſcarce appear through the hair: the noſe blunt, and the eyes little: the teeth large, ſtrong, and yellow: the head and body are covered with thick and pretty long hairs, chiefly black; but mixed with ſome of a reddiſh hue: the belly is of an iron-grey: the tail is covered with ſhort black hairs, the tip of it with white hairs.

A female that we opened had ſix young ones in it.

Species IV. The long-tailed Field Mouſe.

Mus domeſticus medius. *Raii ſyn. quad.* 218.

Mus cauda longa ſupra e fuſco flaveſcens infra ex albo cinereſcens. *Briſſon quad.* 123.

De Buffon, Tom. vii. 325. Tab. 41.

Mus ſylvaticus. M. cauda longa, palmis tetradactylis, plantis pentadactylis, corpore griſeo pilis nigris abdomine albo. *Lin. ſyſt.* 84.

Faun. Suec. 36.

Brit. Zool. 49.

N A M E S.

Brit. Llygoden ganolig, Llygoden y maes

Fren. Le Mulot

Dan. Voed

THIS meaſures from the noſe-end to the ſetting on of the tail, four inches and half: the tail is four inches long: the eyes are black, large, and full: the ears prominent: the head and upper part of the body, is of a yellowiſh brown, mixed with ſome duſky hairs: the breaſt is of an ochre color; the reſt of the under ſide is white: the tail is covered with ſhort hair.

Theſe animals are found only in fields and gardens: in ſome places they are called bean-mice, from the havoke they make among beans when firſt ſown. They feed alſo on nuts, acorns, and corn, forming in their burroughs vaſt magazines of winter proviſion.

Sæpe exiguus mus
Sub terris poſuitque domos atque horrea fecit.
Virgil. Georg. 1. I. 181.

Doctor *Derham* takes notice of this wonderful ſagacity of theirs, in providing againſt that ſeaſon when they would find a defect of food abroad: but they provide alſo for other animals: the hog comes in for a ſhare; and the great damage we ſuſtain in our fields, by their rooting up the ground, is chiefly owing to their ſearch after the concealed hoards of the field mice.

They generally make the neſt for their young very near the ſurface, and often in a thick tuft of graſs; they bring from ſeven to ten at a time.

Species V. The ſhort-tailed Field Mouſe.

Mus agreſtis capite grandi brachiurus. *Raii ſyn. quad.* 218.

Mus cauda brevi pilis e nigricante et ſordide luteo mixtis in dorſo et ſaturate cinereis in ventre veſtitis. *Briſſon quad.* 125.

Mus agreſtis. *Faun. Suec.* 30. *De Buffon, Tom.* vii. 369. *Tab.* 47.

Klein quad. 57. *No.* 50.

Br. Zool. 50.

NAMES.

Brit. Llygoden gwtta'r maes

Ital. Campagnoli

Fren. Le petit Rat de champs, Le campagnol

Dan. Skier-muus

THE length of this ſpecies, from the noſe to the tail, is about ſix inches; the tail only an inch and a half: the head is very large: the eyes prominent: the ears quite hid in the fur: the whole upper part of the body, is of a ferruginous color, mixed with black; the under ſide of a deep aſh-color: the tail is covered with ſhort hair, ending with a little buſh, about a quarter of an inch long.

This

This animal makes its neſt in moiſt meadows, and brings eight young at a time: it has a ſtrong affection for them: one that was ſeduced into a wire-trap, by placing its brood in it, was ſo intent on foſtering them, that it appeared quite regardleſs of its captivity. The manner of this creature much reſembles the laſt ſpecies: like it, this reſides under ground, and lives on nuts, acorns, but particularly on corn: it differs from the former in the place of its abode; ſeldom infeſting gardens.

Species VI. The common MOUSE.

Mus domeſticus vulgaris ſeu minor. *Raii ſyn. quad.* 218.
Seb. Muſeum, i. *Tab.* 111. f. 6. its ſkeleton. *Tab.* 31.
Geſner quad. 714.
Mus cauda longiſſima, obſcure cinereus, ventre ſubalbeſcente. *Briſſon quad.* 119.
De Buffon, Tom. vii. 309. *Tab.* 39.
Mus muſculus. M. cauda elongata, palmis tetradactylis, plantis pentadactylis. *Lin. ſyſt.* 83.
Faun. Suec. 34.
Mus minor, Muſculus vulgaris. *Klein quad.* 57.
Br. Zool. 50.

NAMES.

Brit.	Llygoden	*Germ.*	Maus
Fren.	La Souris	*Dut.*	Muys
Ital.	Topo, ſorice	*Swed.*	Mus
Span.	Raton	*Dan.*	Muus
Port.	Ratinho		

THIS timid, cautious, active, little animal, is too well known to require a deſcription; it is entirely domeſtic, being never found in fields; or, as M. *Buffon* obſerves, in any countries uninhabited by mankind: it breeds very frequently in the year, and brings

brings six or seven young at a time. This species is often found of a pure white, in which state it makes a most beautiful appearance; the fine full eye appearing to great advantage, amidst the snowy color of the fur. The root of *white hellebore* and *staves acre*, powdered and mixed with meal, is a certain poison to them.

Genus XVII. The HEDGE HOG.

Species I. The HEDGE HOG, or URCHIN.

Echinus sc. erinaceus terrestris. *Raii syn. quad.* 231.
Meyer's an. i. Tab. 95, 96.
Sib. Scot. 11.
Erinaceus parvus nostras. *Seb. Mus.* i. p. 78. *Tab.* 49. f. 1, 2.
Erinaceus auriculis erectis. *Brisson quad.* 128.
De Buffon, Tom. viii. 28. *Tab.* 6.
Echinus terrestris. *Gesner quad.* 368.
Erinaceus europæus. *Lin. syst.* 75.
Erinaceus spinosus auriculatus. *Faun. Suec.* 22.
Acanthion vulgaris nostras. *Klein quad.* 66.
Br. Zool. 51.

NAMES.

Brit.	Draenog, Draen y coed	*Germ.*	Eigel
Fren.	L'Herisson	*Dut.*	Eegel-varken
Ital.	Riccio	*Swed.*	Igelhot
Span.	Erizo	*Dan.*	Pin-suin, Pin-soe
Port.	Ourizo		

THE usual length of this animal, exclusive of the tail, is ten inches: the tail is little more than an inch long; but so concealed by the spines as scarce to be visible. The form of the nose, is like that of the hog; the upper mandible being much longer than the lower; and the end flat: the nostrils are narrow, terminated on each side by a thin loose flap:

the color of the noſe is dusky; it is covered by a few ſcattered hairs: the upper part of the head, the ſides, and the rump, are clothed with ſtrong ſtiff hairs, approaching the nature of briſtles, of a yellowiſh and cinereous hue.

The legs are ſhort, of a dusky color, and almoſt bare: the toes on each foot are five in number, long and ſeparated the whole way: the thumb or interior toe, is much ſhorter than the others: the claws long, but weak: the whole upper part of the body and ſides, are cloſely covered with ſtrong ſpines, of an inch in length, and very ſharp pointed: their lower part is white, the middle black, the points white. The eyes are ſmall and placed high in the head: the ears are round, pretty large and naked. The mouth is ſmall, but well furniſhed with teeth: in each jaw are two ſharp pointed cutting teeth: in the upper jaw are on each ſide four tuſhes, and five grinders: in the lower jaws on each ſide are three tuſhes, pointing obliquely forward; and beyond thoſe, four grinders. Mr. *Briſſon*, from whoſe obſervations this account of the teeth has been taken, has given a very accurate figure of the jaws and teeth, p. 295.

The hedge hog is a nocturnal animal, keeping retired in the day; but is in motion the whole night, in ſearch of food. It generally reſides in ſmall thickets, in hedges, or in ditches covered with buſhes; lying well wrapped up, in moſs, graſs, or leaves: its food is roots, fruits, worms, and inſects: it lies under the undeſerved reproach of ſucking cattle, and hurting their udders; but the ſmallneſs of its mouth renders that impoſſible.

It is a mild, helpleſs, and patient animal; and would be liable to injury from every enemy, had not providence guarded it with a ſtrong covering; and a power of rolling itſelf into a ball; by that means ſecuring the defenceleſs parts. The barbarity of anatomiſts furniſhes us with an amazing inſtance of its patience; one that was diſſected alive, and whoſe feet were nailed down to the table endured that, and every ſtroke of the operator's knife, without even one groan *.

Genus XVIII. The MOLE.

Species I. The MOLE.

Talpa. The Mole, Mold-Warp, or Want. *Raii ſyn. quad.* 236.
Spotted Mole. *Edw.* 268.
Meyer's an. i. *Tab.* 2.
Talpa alba noſtras. *Seb. Muſ.* i. p. 61. *Tab.* 32. f. 1.
Sib. Scot. 11.
Geſner quad. 931.
Talpa caudata nigricans pedibus anticis et poſticis pentadactylis. *Briſſon quad.* 203.
De Buffon, viii. 81. *Tab.* 12.
Talpa europæus. T. caudata, pedibus pentadactylis. *Lin. ſyſt.* 73.
Faun. Suec. 23.
Talpa. *Klein quad.* 60.
Br. Zool. 52.

NAMES.

Brit.	Gwadd, Twrch daear	*Germ.*	Mulwerf
Fren.	La Taupe	*Dut.*	Mol
Ital.	Talpa	*Swed.*	Mulvad, Surk
Span.	Topo	*Dan.*	Muldvarp
Port.	Toupeira		

THERE are many animals in which the divine wiſdom may be more agreeably illuſ-

* *Claris terebrari ſibi pedes et diſcindi viſcera patientiſſimé ferebat; omnes cultri ictus ſine gemitu pluſquam Spartanâ nobilitate concoquens.* Borrich in Blas, de Echino. Derham's Phyſ. Theol. 240.

trated

trated; yet the uniformity of its attention to every article of the creation, even the moſt contemptible, by adapting the parts to its deſtined courſe of life, appears more evident in the mole than in any other animal.

A ſubterraneous abode being allotted to it, the ſeeming defects of ſeveral of its parts, vaniſh; which, inſtead of appearing maimed, or unfiniſhed, exhibit a moſt ſtriking proof of the fitneſs of their contrivance.

The breadth, ſtrength, and ſhortneſs of the fore-feet, which are inclined ſideways, anſwer the uſe as well as form of hands; to ſcoop out the earth, to form its habitation, or to purſue its prey. Had they been longer, the falling in of the earth would have prevented the quick repetition of its ſtrokes in working, or have impeded its courſe: the oblique poſition of the fore-feet, has alſo this advantage, that it flings all the looſe ſoil behind the animal.

The form of the body is not leſs admirably contrived for its way of life: the fore part is thick and very muſcular, giving great ſtrength to the action of of the fore-feet; enabling it to dig its way with amazing force and rapidity, either to purſue its prey, or elude the ſearch of the moſt active enemy. The form of its hind parts which are ſmall and taper, enables it to paſs with great facility through the earth, that the fore-feet had flung behind; for had each part of the body been of equal thickneſs, its flight would have been impeded, and its ſecurity precarious.

The ſmallneſs of the eyes (which gave occaſion

to

to the ancients to deny it the ſenſe of ſight *,) is to this animal a peculiar happineſs: a ſmall degree of viſion, is ſufficient for an animal ever deſtined to live under ground: had theſe organs been larger, they would have been perpetually liable to injuries, by the earth falling into them; but nature, to prevent that inconvenience, hath not only made them very ſmall, but alſo covered them very cloſely with fur. Anatomiſts mention (beſides theſe) a third very wonderful contrivance for their ſecurity; and inform us that each eye is furniſhed with a certain muſcle, by which the animal has power of withdrawing or exerting them, according to its exigencies.

To make amends for the dimneſs of its ſight, the mole is amply recompenced, by the great perfection of two other ſenſes, thoſe of hearing and of ſmelling: the firſt gives its notice of the moſt diſtant approach of danger: the other, which is equally exquiſite, directs it in the midſt of darkneſs, to its food: the noſe alſo, being very long and ſlender, is well formed for thruſting into ſmall holes, in ſearch of the worms and inſects that inhabit them. Theſe gifts may with reaſon be ſaid to compenſate the defect of ſight, as they ſupply in this animal all its wants, and all the purpoſes of that ſenſe. Thus amply ſupplied as it is, with every neceſſary accomodation of life; we muſt avoid aſſenting to an obſervation of M. *de Buffon*, and only refer the reader to the note, where he may find the very

* Aut *oculis capti* fodere cubilia talpæ. *Virg. Georg.* 1.

words

words of that author; and compare them with thoſe of our illuſtrious countryman, Mr. *Ray* *.

The mole breeds in the ſpring, and brings four or five young at a time: it makes its neſt of moſs, and that always under the largeſt hillock, a little below the ſurface of the ground. The mole is obſerved to be moſt active, and to caſt up moſt earth, immediately before rain: and in the winter before a thaw; becauſe at thoſe times the worms and inſects begin to be in motion, and approach the ſurface: on the contrary, in very dry weather, this animal ſeldom or never forms any hillocks, as it penetrates deep after its prey, which at ſuch ſeaſons retires far into the ground. The mole ſhews great art in ſkinning a worm, which it always does before it eats it; ſtripping the ſkin from end to end, and ſqueezing out all the contents of the body.

Theſe animals do incredible damage in gardens, and meadows; by looſening the roots of plants, flowers, graſs, corn, *&c.* *Mortimer* ſays, that the roots of *Palma chriſti* and *white hellebore*, made into a paſte, and laid in their holes, will deſtroy them. They ſeem not to have many enemies among other animals, except in *Scotland*, where (if we may depend

* La taupe ſans être aveugle, a les yeux ſi petis, ſi couverts, qu'elle ne peut faire grand uſage du ſens de la vûe: *en dedommagement la nature lui a donné avec magnificence l'uſage du ſixième ſens*, &c.

Mr. *Ray* makes the latter obſervation; but forms from it a concluſion much more ſolid and moral. *Teſtes maximos, paraſtatas ampliſſimas, novum corpus ſeminale ab his diverſum et ſeparatum——penem etiam facile omnium, ni fallor, animalium longiſſimum: ex quibus colligere eſt maximam præ reliquis omnibus animalibus voluptatem in coitu hoc abjectum et vile animalculum percipere, ut habeant quod ipſi invideant, qui in hoc ſupremas vitæ ſuæ delicias collocant.* *Raii ſyn. quad.* 238, 239.

on

on Sir *Robert Sibbald*) there is a kind of mouſe, with a black back, that deſtroys moles *. We have been aſſured that moles are not found in *Ireland*.

Genus XIX. The SHREW MOUSE.

Species I. The SHREW MOUSE.

Mus araneus. Shrew, Shrew Mouſe, or Hardy Shrew. *Raii ſyn. quad.* 233.
Geſner quad. 747.
Mus araneus ſupra ex fuſco rufus infra albicans. *Briſſon quad.* 126.
De Buffon, Tom. viii. 57. *Tab.* 10.
Sorex araneus. S. cauda corpore longiore. *Lin. ſyſt.* 74.
Faun. Suec. 24.
Mus araneus roſtro productiore. *Klein quad.* 58.
Br. Zool. 54.

NAMES.

Brit. Llygoden goch, Chwiſtlen, Llyg
Fren. La Muſaraigne
Ital. Toporagno
Span. Murganho
Port.
Germ. Spitzmus, Ziſmuſs, Muger
Swed. Nabbmus
Dan. Næbmuus, Muuſeſkier

THE length of this little animal, from the end of the noſe to the origin of the tail is two inches and a half: that of the tail, near one inch and a half: the noſe is very long and ſlender; and the upper mandible is much longer than the lower: the ears are ſhort, and rounded: the eyes are very ſmall; and, like thoſe of the mole, almoſt concealed in the hair. The color of the head, and upper part of the body, is of a browniſh dusky red: the belly of a dirty white: the tail is covered with ſhort dusky hairs:

* *Sib. Hiſt. Scot.* part iii. p 12.

the

the legs are very ſhort: the hind legs are placed very far back; the feet are divided into five diſtinct toes.

The teeth are twenty-eight in number; and of ſo ſingular a form, as to engage the attention of moſt naturaliſts. *Geſner* is of opinion, that nature ſeems to have formed, in this animal, teeth of mixed ſhape, between thoſe of mice and ſerpents: the two upper fore-teeth are very ſharp, and on each ſide of them grows a minute proceſs, ſcarce viſible, except on a near inſpection: the other teeth are placed cloſe together, are very ſmall, and ſeem ſcarce ſeparated.

The ſhrew mouſe inhabits old walls, heaps of ſtones, or holes in the earth: is frequently found near out-buildings, hay-ricks, dung-hills, and neceſſary houſes: it lives on inſects, corn, and any filth; and has been obſerved rooting like a hog in the laſt named places: either from its food, or its nature, it has a ſtrong diſagreeable ſmell; inſomuch that the cat will kill it, yet refuſes to eat it. It is ſaid to bring four or five young at a time.

Genus XX. The BAT.

Species I. The short-eared BAT.

Vespertilio. Bat, Flitter, or Flutter Mouse. *Raii syn. quad.* 243.

Short-eared *English* Bat. *Edw. av.* 201. f. 2.

Seb. Mus. i.

The Rear Mouse. *Charlton ex.* 80.

Meyer's an. i. Tab. 3.

Gesner av. 766.

Vespertilio murini coloris, pedibus omnibus pentadactylis. *Brisson quad.* 158.

La chauve souris. *De Buffon Tom.* viii. 113. Tab. 16.

Vespertilio murinus. *Lin. Syst.* 47.

V. caudatus naso oreque simplicibus. *Faun. Suec.* 2.

V. major. *Klein quad.* 61.

Vespertilio. *Plinii Lib.* x. 6. 61.

Br. Zool. 55.

NAMES.

Brit. Ystlum

Fren. La Chauve souris

Ital. Nottola, Notula, Sporteglione, Vispistrello, Vilpistrello

Span. Murcielago, Morciegalo

Port. Morcego

Germ. Speckmaus, Fledermaus

Dut. Vledermuys

Swed. Laderlap, Fladermus

Dan. Flagermus, Aftensbakke

THIS singular animal was placed by *Pliny*, *Gesner*, *Aldrovandus*, and some other naturalists among the birds: they did not consider, that it wanted every character of that order of animals, except the power of flying: if the irregular, uncertain, and jerking motion * of the bat in the air, can merit the name of flight. No birds whatsoever are furnished with teeth, or bring forth their young alive, and suckle them: were other notes wanting, these would be sufficient to determine that the bat is a quadruped.

* The *English* synonym of this animal, *Flitter*, or *Flutter mouse*, is very expressive of its action in the air.

The ſpecies now deſcribed, is the larger of the two kinds found in *England*; and the moſt common: the uſual length of it, is about two inches and a half: the extent of the fore-legs nine inches.

The members that are uſually called the wings, are nothing more than the four interior toes of the fore-feet, produced to a great length, and connected by a thin membrane; which extends alſo to the hind legs; and from them to the tail: the firſt toe is quite looſe, and ſerves as a heel, when the bat walks; or as a hook, when it would adhere to any thing. The hind feet are diſengaged from the membrane, and divided into five toes, furniſhed with pretty ſtrong claws. The membranes are of a duſky color: the body is covered with ſhort fur, of a mouſe-color, tinged with red. The eyes are very ſmall: the ears like thoſe of the mouſe.

This ſpecies of bat is very common in *England*: it makes its firſt appearance early in the ſummer, and begins its flight in the duſk of the evening: it principally frequents the ſides of woods, glades, and ſhady walks; and is alſo frequently obſerved to ſkim along the ſurface of pieces of water, in queſt of gnats and inſects; theſe are not its only food; for it will eat meat of any kind that it happens to find hanging up, in a larder.

The bat brings only two young at a time; which it ſuckles from two teats placed on the breaſt, like thoſe of the human race: for this reaſon, *Linnæus* has claſſed this animal in the ſame order with mankind; and has honored both, with the common title of *Primates*, or chiefs of the creation.

Towards the latter end of ſummer, the bat retires into caves, ruined buildings, the roofs of houſes, or hollow trees; where it remains the whole winter, in a ſtate of inaction; ſuſpended by the hind feet, and cloſely wrapped up in the membranes of the fore-feet.

The voice of the bat is ſomewhat like that of the mouſe; but very low, and weak. *Ovid* takes notice both of that, and the derivation of its *Latin* name.

Lucemque peroſæ
Nocte volante, ſeroque tenent a veſpere nomen.
Minimam pro corpore vocem
Emittunt peraguntque levi ſtridore querelas.

Met. lib. iv. 10.

II. The LONG-EARED BAT.

Edw. av. 201. f. 3.
Alb. iii. Tab. 101.
La petite chauve ſouris de notre pays. *Briſſon quad.* 160.
L'oreillar. *De Buffon, Tom.* viii. 118. 127. Tab. 17. f. 1.
Veſpertilio auritus. *Lin. ſyſt.* 47.
V. auritus, naſo oreque ſimplici, auriculis duplicatis, capiteque fuſco. *Faun. Suec.* 3.
Br. Zool. 56.

THIS ſpecies is much inferior in ſize to the former: the length being only an inch and three quarters; and the extent of the fore-legs ſeven inches.

The principal diſtinction, between this and the common kind, is the ears; which in this are above an inch long, very thin, and almoſt tranſparent: within each of theſe is a leſſer ear, or at leaſt a membrane reſembling one; which, as Mr. *Edwards* obſerves, may poſſibly ſerve as a valve to cloſe the larger, in the ſleeping ſtate of this animal.

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II. Water Birds.

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No back toe - - - - - - - -	XII. Auks	401
Strong, ſtrait, ſharp pointed bills	XIII. Divers	413
Strong bills hooked at the end; an angular knob on the lower mandible: narrow oblong noſtrils	XIV. Gulls	416
Strait, ſlender, ſharp-pointed bills: forked tails - - - - - - -	XV. Terns	428
Strong bills hooked at the end; tubular noſtrils: ſharp proceſs inſtead of the back toe - -	XVI. Petrels	431
Long ſlender bills hooked at the ends, and the edges furniſhed with numerous ſmall teeth -	XVII. Gooſanders	436
Flat broad bills - - - - - - -	XVIII. Ducks	440
Each of the four toes connected by a web - - - - - - - -	XIX. Corvorants	476

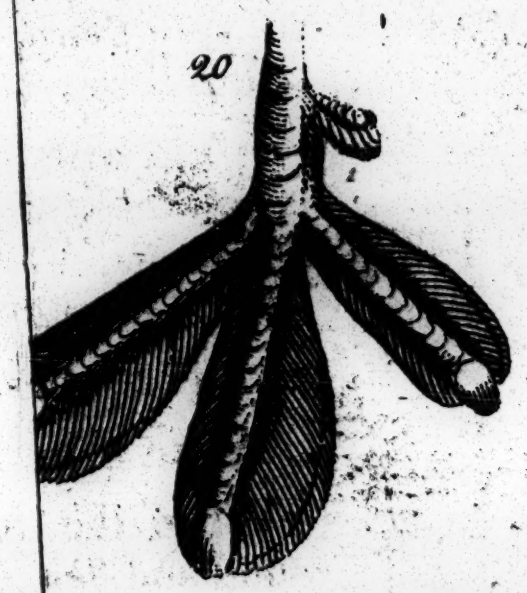
Explanation of ſome technical Terms in Ornithology uſed in this Work, and by *Linnæus*.

Fig.		
1.	*Cere. Cera*	The naked ſkin that covers the baſe of the bill in the *hawk* kind.
2.	*Capiſtrum*	A word uſed by *Linnæus* to expreſs the ſhort feathers on the forehead juſt above the bill. In *Crows* theſe fall forward over the noſtrils.
3.	*Lorum*	The ſpace between the bill and the eye generally covered with feathers, but in ſome birds naked, as in the black and white *Grebe*.
4.	*Orbits. Orbita*	The ſkin that ſurrounds the eye, which is generally bare, particularly in the *Heron* and *Parrot*.
5.	*Emarginatum*	A bill is called *roſtrum emarginatum* when there is a ſmall notch near the end: this is conſpicuous in that of *Butcher-birds* and *Thruſhes*.
6.	*Vibriſſæ*	*Vibriſſæ pectinatæ*, ſtiff hairs that grow on each ſide the mouth, formed like a double comb, to be ſeen in the *Goat-ſucker*, *Flycatcher*, &c.
7.	*Baſtard wing. Alula ſpuria*	A ſmall joint riſing at the end of the middle part of the wing, or the *cubitus*; on which are three or five feathers.

8. *Leſſer*



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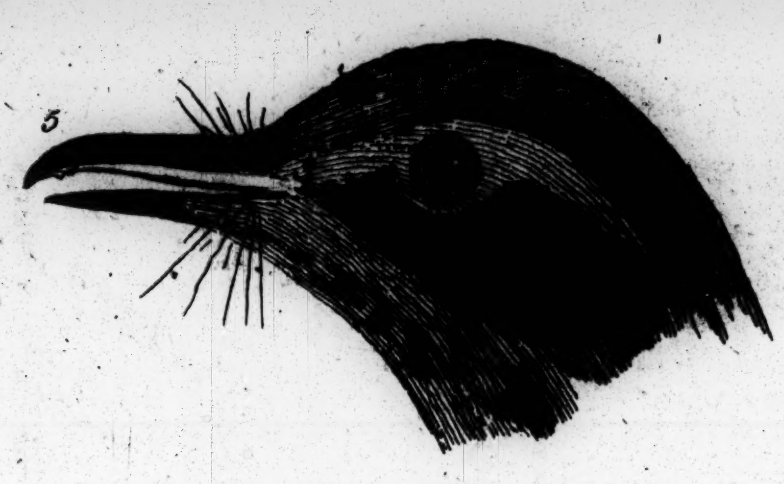
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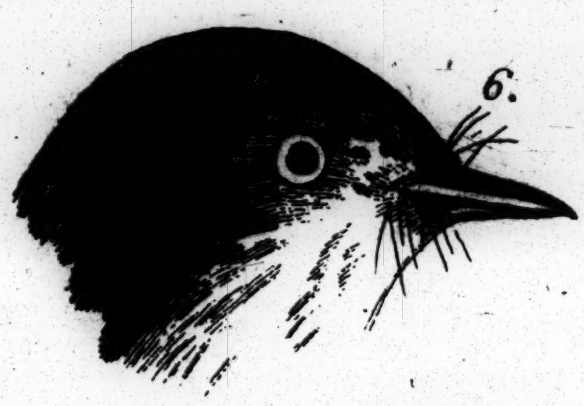
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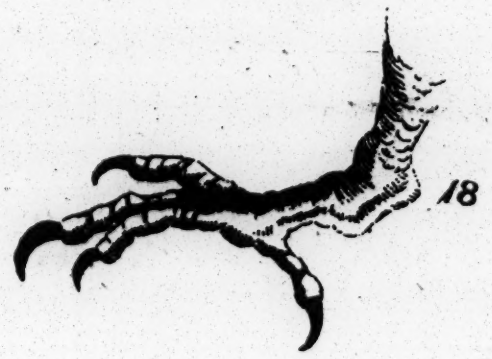
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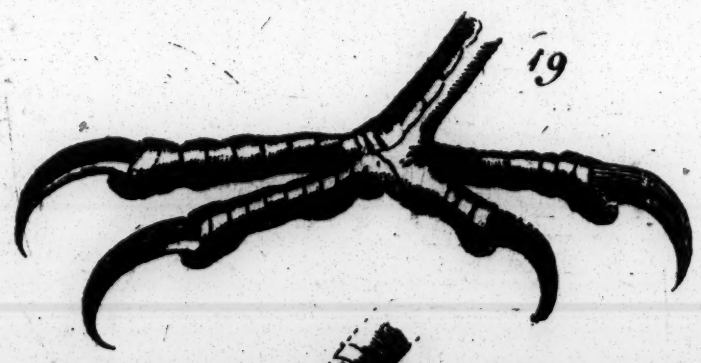

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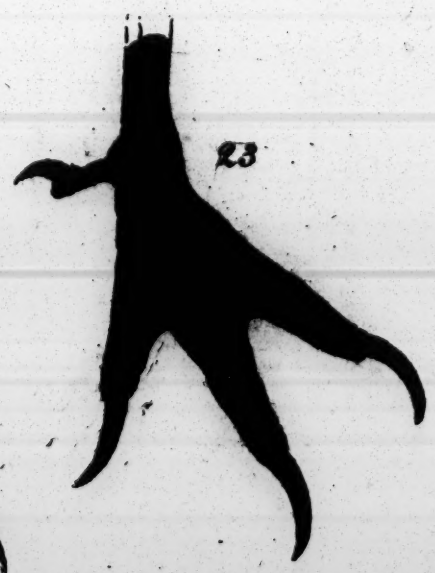

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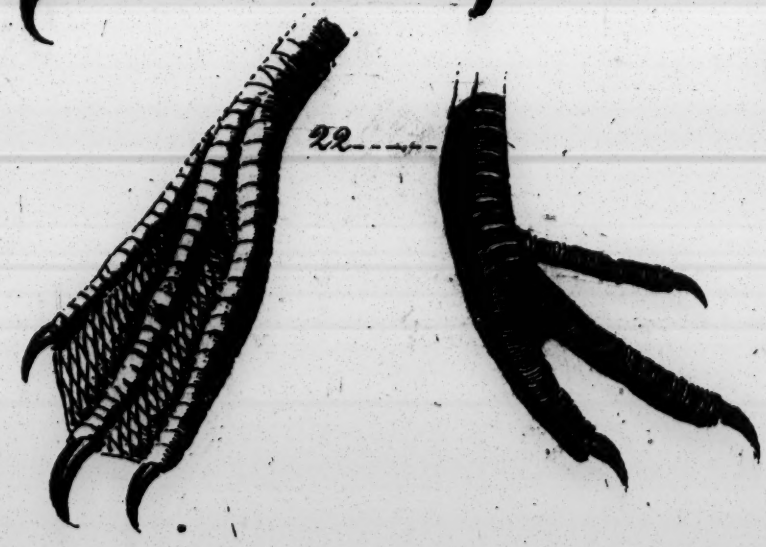

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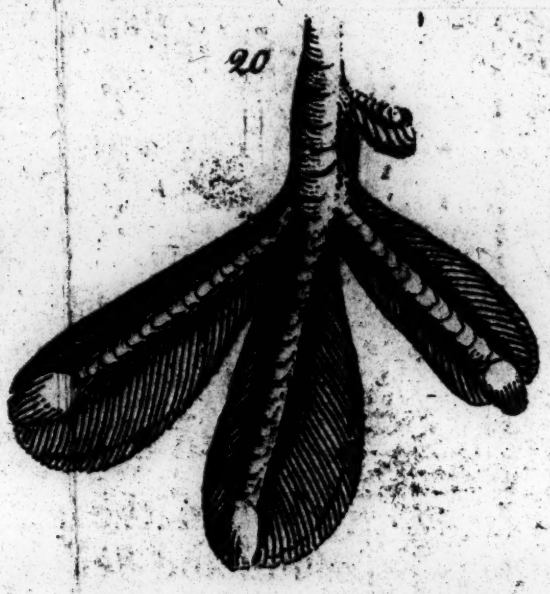

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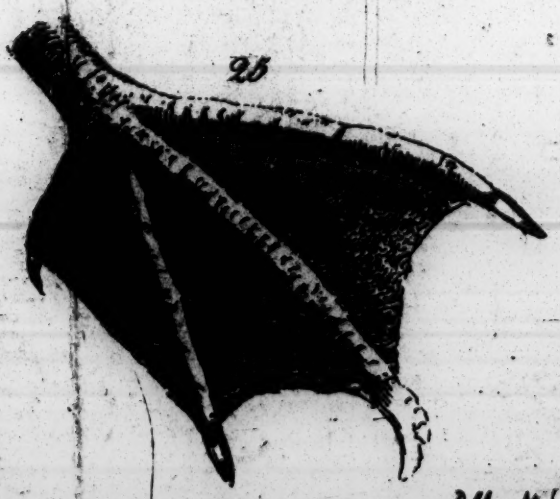












P. Mazell fec.

CHAPITRE

8. *Leſſer coverts of the wings.* *Tectrices primæ* The ſmall feathers that lie in ſeveral rows on the bones of the wings. The *under coverts* are thoſe that line the inſide of the wings.

9. *Greater coverts.* *Tectrices ſecundæ* The feathers that lie immediately over the quil-feathers and ſecondary feathers.

10. *Quil-feathers.* *Primores* The largeſt feathers of the wings, or thoſe that riſe from the firſt bone.

11. *Secondary feathers.* *Secondariæ* Thoſe that riſe from the ſecond.

12. *Coverts of the tail.* *Uropygium* Thoſe that cover the baſe of the tail.

13. *Vent-feathers.* Thoſe that lie from the vent to the tail. *Criſſum Linnæi.*

14. *The tail.* *Rectrices*

15. *Scapular-feathers* That riſe from the ſhoulders and cover the ſides of the back.

16. *Nucha* The hind part of the head.

17. *Roſtrum ſubulatum* A term *Linnæus* uſes for a ſtrait and ſlender bill.

18. To ſhew the ſtructure of the feet of the *Kingfiſher.*

19. *Pes ſcanſorius* The foot of the *Woodpecker* formed for climbing.

20. *Finned-foot.* *Pes lobatus, pinnatus* Such as thoſe of the *Grebes*, &c. ſuch as are indented as *fig.* 21. are called ſcalloped, ſuch are thoſe of *Coots* and ſcallop toed *Sandpipers.*

22. *Pes tridactylus* Such as want the back toe.

23. *Semi-palmated.* *Pes ſemi-palmatus* When the webs only reach half way of the toes.

24. *Ungue poſtico ſeſſili*	When the hind claw adheres to the leg without any toe, as in the *Petrels*.
25. *Digitis 4 omnibus palmatis*	All the four toes connected by webs as in the *Corvorants*.

Explanation of other *Linnæan* Terms.

Roſtrum cultratum	When the edges of the bill are very ſharp, ſuch as in that of the *Crow*.
Unguiculatum	A bill with a nail at the end, as in thoſe of the *Gooſanders* and *Ducks*.
Lingua ciliata	When the tongue is edged with fine briſtles, as in *Ducks*.
Integra	When quite plain or even.
Lumbriciformis	When the tongue is long, round and ſlender like a worm, as that of the *Woodpecker*.
Pedes compedes	When the legs are placed ſo far behind as to make the bird walk with difficulty, or as if *in fetters*; as is the caſe with the *Auks*, *Grebes* and *Divers*.
Nares Lineares	When the noſtrils are very narrow, as in *Sea Gulls*.
Marginatæ	With a rim round the noſtrils, as in the *Stare*.

A CATALOGUE OF BRITISH BIRDS*.

I. LAND BIRDS.

	English Names.	British Names.
1	GOLDEN Eagle	Yr Eryr melyn
2	Ringtail Eagle	Eryr tinwyn
3	Sea Eagle	Eryr mawr y mor. Mor Eryr
4	Oſprey	Pyſg Eryr, Gwalch y weilgi
5	Erne	Eryr cynffonwyn
6	Gyrfalcon	Hebog chwyldro
7	Peregrine Falcon	Hebog tramor. Cammin
8	Grey Falcon	Hebog. Gwalch
9	Lanner	Hebog gwlanog
10	Goſhawk	Hebog Marthin
11	Kite	Barcud
12	Common Buzzard	Bod teircaill
13	Honey Buzzard	Bod y mel
14	Moor Buzzard	Bod y gwerni
15	Hen-Harrier	Bod tinwyn
16	Keſtril	Cudyll coch. Ceinllef goch
17	Hobby	Hebog yr Hedydd
18	Sparrow Hawk	Pilan. Gwepia
19	Merlin	Corwalch. Llymyſten
20	Long-eared Owl	Dylluan gorniog
21	Short-eared Owl	Dylluan gluſtiog

* For the *Britiſh* names we are indebted to that maſter of the language, *Richard Morris*, Eſq; of the Navy-office.

	English Names.	British Names.
22	White Owl	Dylluan wen
23	Tawny Owl	Dylluan frech
24	Brown Owl	Dylluan rudd. Aderyn y cyrph
25	Little Owl	Coeg Ddylluan
26	Great Butcher-bird	Y Cigydd mawr
27	Red-back'd Butcher-bird	Y Cigydd cefngoch
28	Woodchat	Y Cigydd glas
29	Leſt Butcher-bird	Y Cigydd bach. Y Barfog
30	Raven	Bran. Cigfran
31	Crow	Bran dyddyn. Bran dyfyn
32	Rook	Ydfran
33	Royſton Crow	Bran yr Iwerddon
34	Magpie	Piogen. Y Bi
35	Jay	Piogen y coed
36	Chatterer	Sidan gynffon
37	Jackdaw	Cogfran
38	Green Woodpecker	Cnoccell y coed. Delor y derw
39	Greater Spotted Woodpecker	Y Ddelor fraith
40	Leſſer Spotted Woodpecker	Delor fraith lefaf
41	Wryneck	Y Pengam. Gwas y Gog
42	Cuckoo	Cog
43	Nut-hatch	Delor y cnau
44	Kingfiſher	Glas y dorlan
45	Creeper	Y Grepianog
46	Hoopoe	Y Goppog
47	Corniſh Chough	Bran big-coch
48	Cock of the Wood	Ceiliog coed
49	Black Cock	Ceiliog du. Grugiar
50	Grous	Ceiliog mynydd. Jar fynydd
51	Ptarmigan	Coriar yr Alban

52 Par-

	ENGLISH NAMES.	BRITISH NAMES.
52	Partridge	Petriſen. Coriar
53	Quail	Sofliar
54	Buſtard	Yr Araf ehedydd
55	Common Pigeon	Colomen
56	Ring-dove	Yſguthan
57	Turtle	Colomen fair. Turtur
58	Miſſel-bird	Y Dreſglen. Pen y llwyn. Crecer
59	Fieldfare	Caſeg y ddryccin
60	Throſtle	Ceiliog bronfraith
61	Redwing	Y Dreſglen goch. Soccen yr eira
62	Blackbird	Yr Aderyn du. Ceiliog Mwyalch
63	Ring-ouzel	Mwyalchen y graig
64	Water-ouzel	Mwyalchen y dwfr
65	Stare	Drudwen. Dreadwy. Y Drydwe
66	Sky-lark	Hedydd. Uchedydd. Ehedydd
67	Wood-lark	Hedydd y coed. Efgudogyll
68	Tit-lark	Goeg Hedydd. Cor Hedydd
69	Leſſer Field-lark	Hedydd bach y cae
70	Red-lark	Hedydd coch
71	Leſſer Creſted-lark	Hedydd cribog
72	Graſshopper-lark	Gwich Hedydd
73	Willow-lark	Hedydd yr helyg
74	Houſe-ſwallow	Gwennol. Gwenfol
75	Martin	Marthin
76	Sand-martin	Gwennol y glennydd
77	Swift	Marthin du
78	Goatſucker	Aderyn y droell. Y Rhodwr
79	Nightingale	Eos
80	Redſtart	Rhawn-goch. Rhonell goch
81	Redbreaſt	Yr Hobi goch. Bron-goch

	English Names.	British Names.
82	Blackcap	Penddu'r brwyn
83	Pettichaps	Y Ffigyfog
84	Fly-catcher	Y Gwybedog
85	Hedge-ſparrow	Llwyd y gwrych
86	Willow Wren	Dryw'r helyg
87	Golden-creſted Wren	Yſwigw. Sywidw.
88	Wren	Dryw
89	Wheat-ear	Y Gynffonwen
90	Whin-chat	Clochder yr eithin
91	Stone-chatter	Clochder y cerrig
92	Cold-finch	Clochder y mynydd
93	White-throat	Y Gwddfgwyn
94	White Water-wagtail	Brith y fuches. Tinſigl y gwys
95	Yellow Water-wagtail	Brith y fuches felen
96	Grey Water-wagtail	Brith y fuches lwyd
97	Groſbeak	Gylfinbraff
98	Croſsbill	Gylfin-groes
99	Bulfinch	Y Chwibanydd
100	Sparrow	Aderyn y to. Golfan
101	Greenfinch	Llinos werdd. Y Gegid
102	Goldfinch	Gwas y fierri. Peneuryn
103	Chaffinch	Bronrhuddyn
104	Brambling	Bronrhuddyn y mynydd
105	Mountain Sparrow	Golfan y mynydd
106	Siſkin	Y Ddreiniog
107	Linnet	Llinos
108	Greater red-headed Linnet	Llinos ben-goch fwyaf
109	Leſſer red-headed Linnet	Llinos ben-goch leiaf
110	Mountain Linnet	Llinos fynydd. Chwibanogl y mynydd
111	Bunting	Bras y ddruttan. Bras yr yd
112	Yellowhammer	Llinos felen. Melynog
113	Reedſparrow	Golfan y cyrs
114	Greater Brambling	Golfan yr eira
115	Leſſer Brambling	Yr Olfan leiaf
116	Great Titmouſe	Y Benloyn fwyaf
117	Blue Titmouſe	Y Lleian. Llygoden y derw

	ENGLISH NAMES.	BRITISH NAMES.
118	Colemouſe	Y Benloyn lygliw
119	Marſh Titmouſe	Penloyn y cyrs
120	Long-tail'd Titmouſe	Y Lleian gynffonhir

II. CLOVEN-FOOTED WATER BIRDS.

121	Creſted Heron	Cryr Coppog
122	Common Heron	Cryr glas. Cryhyr cam.
123	Bittern	Aderyn y bwn
124	Great White Heron	Cryr gwyn
125	Curlew	Gylfinhir
126	Whimbrel	Coeg Ylfinhir
127	Woodcock	Cyffylog
128	Godwit	Rhoſtog
129	Red Godwit	Rhoſtog coch
130	Leſſer Godwit	Cwttyn du
131	Greenſhank	Coeſwerdd
132	Spotted Redſhank	Coeſgoch mannog
133	Snipe	Yſnid. Yſnittan
134	Jackſnipe	Giach
135	Lapwing	Corniccyll. Cornchwigl
136	Grey Plover	Cwtiaid llwydion
137	Ruffe	Yr Ymladdgar
138	Knot	Y Cnut
139	Aſh-colored Sandpiper	Y Pibydd glas
140	Redſhank	Coeſgoch
141	Spotted Sandpiper	Y Pibydd mannog
142	Black Spotted Sandpiper	Y Pibydd du mannog
143	Turnſtone	Huttan y mor
144	Green Sandpiper	Y Pibydd gwyrdd
145	Sandpiper	Pibydd y traeth
146	Dunlin	Y Pibydd rhuddgoch
147	Purre	Llygad yr ych
148	Sea Pie	Piogen y mor
149	Norfolk Plover	Y Glinbraff
150	Green Plover	Cwtiaid yr aur
151	Long-legged Plover	Cwtiaid hirgoes
152	Dottrel	

	ENGLISH NAMES.	BRITISH NAMES.
152	Dottrell	Huttan
153	Sea Lark	Mor Hedydd
154	Sanderling	Llwyd y tywod
155	Water Rail	Cwtiar. Y Fronwen. Rhegen y dwfr
156	Small ſpotted Water-hen	Corddyfriar famog.
157	Land Rail	Rhegen y rhych. Rhegen yr yd
158	Common Water hen	Dyfriar
159	Grey ſcollop - toed Sandpiper	Y Pibydd llwyd llydandroed
160	Red ditto	Y Pibydd coch llydandroed
161	The Coot	Jar ddwfr foel
162	Great creſted Grebe	Gwyach gorniog. Tindroed
163	Grebe	Gwyach. Dowciar. Wiwawch
164	Leſſer creſted Grebe	Gwyach gluſtiog
165	White and duſky Grebe	Gwyach leiaf
166	Little Grebe	Harri gwlych dy big

III. WEB-FOOTED WATER-FOWL.

167	Avoſetta	Pig mynawyd
168	Great Auk	Y Carfil mawr
169	Auk	Carfil. Gwalch y Penwaig
170	Black-billed Auk	Carfil gylfinddu
171	Puffin	Pwffingen
172	Little Auk	Y Carfil bach
173	Guillemot	Gwilym
174	Leſſer Guillemot	Chwilog
175	Black Guillemot	Gwilym du
176	Great Northern Diver	Y Trochydd mawr
177	Grey ſpeckled Diver	Trochydd bach
178	Red-throated Diver	Y Trochydd gwddfgoch

	English Names.	British Names.
179	Great black and white Gull	Gwylan ddu a gwyn
180	Skua	Gwylan frech
181	Black-toed Gull	Yr Wylan yſgafn
182	Arctic Gull	Gwylan y gogledd
183	Herring Gull	Gwylan Benwaig
184	Brown and white Gull	Gwylan rudd a gwyn
185	Winter Mew	Gwylan y gweunydd
186	Common Gull	Gwylan lwyd. Hucean
187	Tarrock	Gwylan Gernyw
188	Pewit Gull	Yr Wylan benddu. Bran ynor
189	Small brown Gull.	Yr Wylan fechan
190	Greater Tern	Y for-Wennol fawr, Yſgraean
191	Leſſer Tern	Y for-Wennol bach
192	Black Tern	Yſgraean ddu
193	Fulmar	Gwylan y graig
194	Shear-water	Pyffingen Fanaw
195	Little Petrel	Cas gan Longwr
196	Gooſander	Hwyad ddanheddog
197	Leſſer dun Diver	Trochydd danheddog
198	Smew	Y Lleian wen
199	Red-headed Smew	Y Lleian bengoch
200	Wild Swan	Alarch gwyllt. Alarch llwyd
201	Tame Swan	Alarch
202	Gooſe	Gwydd
203	White-fronted wild Gooſe	Gwydd wyllt
204	Bernacle	Gwyrain. Barnacl
205	Brent Gooſe	Barnacl fanyw
206	Eider Duck	Hwyad fwythblu
207	Velvet Duck	Hwyad felfedog
208	Scoter	Y for-Hwyad ddu
209	Tufted Duck	Hwyad goppog
210	Scaup Duck	Llygad arian
211	Golden-eye	Llygad aur
212	Shieldrake	Hwyad yr eithin. Hwyad fraith
213	Wild-duck	Hwyad wyllt. Garan Hwyad. Cors Hwyad
214	Shoveler	Hwyad lydanbig

	English Names.	British Names.
215	Red-breasted Shoveler	Hwyad fron-goch lydanbig
216	Pintail Duck	Hwyad gynffonfain
217	Swallow-tail'd Shield-drake	Hwyad gynffon gwennol
218	Pochard	Hwyad ben-goch
219	Ferruginous Duck	Hwyad frech
220	Grey-headed Duck	Hwyad benllwyd
221	Wigeon	Chwiwiaid
222	Gadwal	Y gors-Hwyad lwyd
223	Gargany	Hwyad addfain
224	Teal	Crach-Hwyad. Cor-Hwyad
225	Corvorant	Mulfran. Morfran
226	Shag	Y Fulfran leiaf
227	Gannet	Gan. Gans

APPENDIX.

228	Roller	Y Rholydd
229	Nutcraker	Aderyn y cnau
230	Rose-colored Ouzel	Y Fwyalchen goch
231	Crane	Garan
232	Egret	Cryr coppog lleiaf
233	Little Bittern	Aderyn y bwn lleiaf

BRITISH ZOOLOGY.

Claſs II. BIRDS.

Div. I. LAND BIRDS.

Genus I. HAWKS.

Species I. The GOLDEN EAGLE.

Grand aigle royal. *Belon av.* 89.
Aquila Germana. *Geſn. av.* 168.
Aquila, aguglia, Chryſaetos. *Aldr.* I. 62.
Gneſios. *Plinii lib.* 10. *c.* 3.
The golden eagle. *Wil. orn.* 58.
Aquila aurea, ſeu fulva. *Raii ſyn. av.* 6.
Aquila Chryſaetos. *Lin. ſyſt.* 125.
Orn. *Faun. Suec. ſp.* 54.
L'Aigle doré. *Briſſon av.* I. 431.
Golden eagle. *Br. Zool.* 61. *Tab.* A.
Stein adler. *Kram.* 325.

THIS ſpecies is found in the mountanous parts of *Ireland*, where it breeds in the loftieſt cliffs: it lays three, and ſometimes four eggs, of which ſeldom more than two are prolific; providence denying a large increaſe to rapacious birds *, becauſe they are noxious to mankind; but graciouſly beſtows an almoſt boundleſs one on ſuch as are of uſe to us. This kind of eagle ſometimes migrates into *Caernarvonſhire*,

* Τῶν γαμψωνύχων ὀλιγοτόκα παντα. Ariſt. hiſt. an.

and there are inſtances, though rare, of their having bred in *Snowdon* hills; from whence ſome writers give that tract the name of *Creigiau'r eryrau*, or the eagle rocks; others that of *Creigiau'r eira*, or the ſnowy rocks: the latter ſeems the more natural epithet; it being more reaſonable to imagine that thoſe mountains, like *Niphates* in *Armenia*, and *Imaus* * in *Tartary*, derived their name from the circumſtance of being covered with ſnow, which is ſure to befal them near the half of every year, than from the accidental appearance of a bird on them, once only in ſeveral years.

Deſcr. The golden eagle weighs about twelve pounds; its length is three feet; the extent of its wings ſeven feet four inches; the bill is three inches long, and of a deep blue color; the cere is yellow; the irides of a hazel color: the ſight and ſenſe of ſmelling are very acute: *her eyes behold afar off* †: the head and neck are cloathed with narrow ſharp pointed feathers, and of a deep brown color, bordered with tawny; but thoſe on the crown of the head, in very old birds turn grey. The whole body, above as well as beneath, is of a dark brown; and the feathers on the back, are finely clouded with a deeper ſhade of the ſame: the wings, when cloſed, reach to the end of the tail: the quil feathers are of a chocolate color, the ſhafts white: the tail is of a deep brown, irregularly barred and blotched with an obſcure aſh color, and uſually

* *Imaus*——incolarum linguâ nivoſum ſignificante. *Plin. lib. 6. c. 21.*

† *Job* 39, 27. Where the natural hiſtory of the eagle is finely drawn up.

white

white at the roots of the feathers: the legs are yellow, ſhort, and very ſtrong, being three inches in circumference, and are feathered to the very feet: the toes are covered with large ſcales, and armed with moſt formidable claws, the middle of which are two inches long.

Eagles in general are very deſtructive to fawns, lambs, kids, and all kind of game; particularly in the breeding ſeaſon, when they bring a vaſt quantity of prey to their young. *Smith*, in his hiſtory of *Kerry*, relates that a poor man in that county got a comfortable ſubſiſtence for his family, during a ſummer of famine, out of an eagle's neſt, by robbing the eaglets of the food the old ones brought, whoſe attendance he protracted beyond the natural time, by clipping the wings and retarding the flight of the former. It is very unſafe to leave infants in places where eagles frequent; there being inſtances in *Scotland* * of two being carried off by them, but fortunately,

Illæſum unguibus hæſit onus.

the theft was diſcovered in time, and the children reſtored unhurt out of the eagles neſts, to the affrighted parents. In order to extirpate theſe pernicious birds, there is a law in the *Orkney* iſles, which entitles any perſon that kills an eagle to an hen out of every houſe in the pariſh, in which it was killed †.

Eagles are remarkable for their longevity; and for their power of ſuſtaining a long abſtinence from food.

* *Martin's hiſt. Weſt. Iſles*, 299. *Sib. hiſt. Scot.* 14.

† *Camden's Brit.* I. 1474. The impreſſion of an eagle and child on the coin of the *Iſle of Man*, was probably owing to ſome accident of this kind.

One of this ſpecies, which has now been nine years in the poſſeſſion of *Owen Holland*, Eſq; of *Conway*, lived thirty-two years with the gentleman who made him a preſent of it; but what its age was when the latter received it from *Ireland* is unknown. The ſame bird alſo furniſhes a proof of the truth of the other remark, having once, through the neglect of ſervants, endured hunger for twenty-one days, without any ſuſtenance whatſoever.

II. The RINGTAIL EAGLE.

Golden eagle, with a white ring about its tail. *Wil. orn.* 59. *Raii ſyn. av.* 6.
White tailed eagle. *Edw.* 1.
Falco fulvus. *Lin. ſyſt.* 125. *Briſſon av.* I. 420.
Ring-tail Eagle. *Br. Zool.* 62.

Deſcr. THIS bird is common to the northern parts of *Europe* and *America*; that figured by Mr. *Edwards*, differing only in ſome white ſpots on the breaſt, from our ſpecies. It is equal in ſize to the precedent: the bill is of a blackiſh horn color; the cere yellow; the whole body is of a deep brown, ſlightly tinged with ruſt color; but what makes a long deſcription of this kind unneceſſary, is the remarkable band of white on the upper part of the tail; the end only being of a deep brown: which character it maintains through every ſtage of life, and in all countries where it is found. The legs are feathered to the feet: the toes yellow, the claws black. Mr. *Willoughby* gives the following very curious account of the neſt of this ſpecies, p. 21.

'In

'In the year of our Lord 1668, in the woodlands 'near the river *Derwent*, in the *Peak* of *Derbyshire*, 'was found an eagle's neſt made of great ſticks, 'reſting one end on the edge of a rock, the other on 'two birch trees; upon which was a layer of ruſhes, 'and over them a layer of heath, and upon the heath 'ruſhes again; upon which lay one young one, and 'an addle egg, and by them a lamb, a hare, and 'three heath poults. The neſt was about two yards 'ſquare, and had no hollow in it. The young eagle 'was black as a hobby, of the ſhape of a goſhawk, 'of almoſt the weight of a gooſe, rough footed, or 'feathered down to the foot; having a white ring 'about the tail.'

Mr. *Willughby* imagines his firſt *ygergus*, or white tailed eagle, p. 61. to be but a variety of this, having the ſame characteriſtic mark, and differing only in the pale color of the head.

The Antients believed, that the pebble, commonly called the *aetites*, or eagle ſtone, was formed in the eagle's neſt, and that the eggs could not be hatched without its aſſiſtance. Many abſurd ſtories have been raiſed about this foſſil, which (as it bears but an imaginary relation to the eagle) muſt be omitted in a zoologic work.

* If the reader's curioſity ſhould be excited, we refer him for information to *Pliny*, lib. x. c. 3. lib. xxx. c. 21: to *Boetius de gemmis*, p. 375. to Dr. *Woodward*'s catalogue of foſſils, vol. i. p. 53. 268. 269. and *Grew's Rarities*, p. 297.

III. The SEA EAGLE.

Bein-brecher, Offifraga, Meer-adler, Fifch-arn, Haliætos. *Gefner av.* 201. 203.
Haliætos. *Turneri,*
Auguifta barbata, Offifraga. *Aldr. av.* i. 118.
Haliætos. *Plinii lib.* 10. c. 3.
Sib. hift. Scot. 14.
Sea eagle, or oſprey. *Wil. orn.* 59. *Raii fyn. av.* 7.
Sea eagle. *Dale's Harwich,* 396.
Martin's hift. Weſt. iſles 70.
Le grand aigle de mer, *Briſſon av.* i. 437.
Sea eagle. *Br. Zool.* 63.
Falco offifragus. *Lin. ſyſt.* 124.
Gaaſe orn. *Brunnich* 13.

THIS ſpecies is found in *Ireland*, and ſeveral parts of *Great-Britain*; the ſpecimen we took our deſcription from, was ſhot in the county of *Galway*; Mr. *Willoughby* tells us there was an aery of them in *Whinfield-park*, *Weſtmoreland*; and the eagle ſoaring in the air, with a cat in its talons, which *Barlow* drew from the very fact which he ſaw in *Stirland**, is of this kind. The cat's reſiſtance brought both animals to the ground, when *Barlow* took them up, and afterwards cauſed the event to be engraved in the thirty-ſixth plate of his collection of prints. *Turner* ſays, that in his days, it was too well known in *England*, for it made horrible deſtruction among the fiſh; he adds, that fiſhermen were fond of anointing their baits with the fat of this bird, imagining that it had a peculiar alluring quality: they were ſuperſtitious enough to believe that whenever the *ſea eagle* hovered over a piece of water, the fiſh, (as if charmed) would riſe to the ſurface with their bellies upwards;

* Mr. *Walpole's* catalogue of engravers, p. 49.

and

and in that manner preſent themſelves to him. No writer ſince *Cluſius* has deſcribed the ſea eagle: though no uncommon ſpecies, it ſeems at preſent to be but little known; being generally confounded with the golden eagle, to which it bears ſome reſemblance. The colors of the head, neck and body, are the ſame with the latter; but much lighter, the tawny part in this predominating: in ſize it is far ſuperior: the bill is larger, more hooked, and more arched; underneath grow ſeveral ſhort, but ſtrong hairs or briſtles, forming a ſort of beard. This gave occaſion to ſome writers to ſuppoſe it to be the *aquila barbata* or bearded eagle of *Pliny*. The interior ſides, and the tips of the feathers of the tail, are of a deep brown; the exterior ſides of ſome are ferruginous, in others blotched with white. The legs are yellow, ſtrong and thick; and feathered but little below the knees; which is an invariable ſpecific difference between this and our firſt ſpecies. This nakedneſs of the legs is beſides no ſmall convenience to a bird who preys among the waters. The claws are of a deep and ſhining black, exceeding large and ſtrong, and hooked into a perfect ſemicircle. Deſcr.

All writers agree, that this eagle feeds principally on fiſh; which it takes as they are ſwimming near the ſurface *, by darting itſelf down on them; not by diving or ſwimming, as ſeveral authors have invented, who furniſh it for that purpoſe with one webbed foot

* *Martin*, ſpeaking of what he calls the great eagles in the weſtern iſles, ſays, that they faſten their talons in the back of the fiſh, commonly of ſalmon, which are often above water, or on the ſurface.

to ſwim with, and another divided foot to take its prey with. *Pliny*, with his uſual elegance, deſcribes the manner of its fiſhing. *Supereſt haliæetos, clariſſima oculorum acie, librans ex alto ſeſe, viſoque in mari piſce, præceps in eo ruens, et diſcuſſis pectore aquis rapiens.*

IV. The OSPREY.

Une Orfraye. *Belon. av.* 96.
Fiſch-adler, Maſſwy, Aquila anataria, Clanga, Planga, Percnos, Morphnos. *Geſner. av.* 196.
Haliætus, ſeu aquila marina. *Geſner av.* 804.
Balbuſhardus. *Turneri.*
Auguiſta piumbina, Aquilaſtro, Haliætus, ſeu Morphnos. *Aldr. av.* I. 105. 114.
Haliætus. *Caii opuſc.* 85.
Bald Buzzard. *Wil. orn.* 69.
Bald buzzard, or ſea eagle. *Raii ſyn. av.* 16.
Fiſhing hawſk. *Cateſby's Carol.* I. *Tab.* 2.
Falco cyanopus. *Klein Stem. Tab.* 8.
Falco Haliætus. *Lin. ſyſt.* 129.
Blafot, Fiſk-orn. *Faun. Suec. ſp.* 63.
Aigle de mer. *Briſſon av.* I. 440. *Tab.* 34.
The Oſprey. *Br. Zool.* 63. *Tab.* A. 1.
Fiſk-oern. *Brunnich*, p. 5.

MR. *Ray* places this bird among the hawks, inſtead of the eagles, on a ſuppoſition that Mr. *Willoughby* had exceeded in his account of its weight; but as we had an opportunity of confirming the words of the latter, from one of this ſpecies juſt taken, we here reſtore it to the aquiline rank, under the name of the Oſprey: which was the name it was known by in *England* above one hundred and ſixty years ago; as appears by Dr. *Kay*, or *Caius*'s deſcription of it, who alſo calls it an eagle.

This bird haunts rivers, lakes, and the ſea-ſhores. It builds its neſt on the ground among reeds, and lays three or four white eggs of an elliptical form; rather leſs

leſs than thoſe of a hen. It feeds chiefly on fiſh *, taking them in the ſame manner as the ſea eagle does, by precipitating itſelf on them, not by ſwimming; its feet being formed like thoſe of other birds of prey, for the left is not at all palmated, as *Linnæus*, copying the errors of antient writers, aſſerts it is †. The *Italians* compare the violent deſcent of this bird on its prey, to the fall of lead into water, and call it, *Auguiſta piumbina*, or the *leaden eagle*.

The bird here deſcribed was a female; its weight was ſixty-two ounces: the length twenty-three inches: the breadth five feet four inches: the wing when cloſed reached beyond the end of the tail: that, as in all the hawk kind, conſiſts of twelve feathers; the two middle feathers were duſky: the others barred alternately on their inner webs with brown and white: on the joint of the wing next the body was a ſpot of white: the quil feathers of the wings were black: the ſecondary feathers and the coverts duſky, the former having their interior webs varied with brown and white. The inner coverts white ſpotted with brown. The head ſmall and flat, the crown white marked with oblong duſky ſpots. The cheeks, chin, belly and breaſt white, the laſt ſpotted with a dull yellow: from the corner of each eye is a bar of brown that extends along the ſides of the neck pointing towards the wing. The legs were very ſhort, thick and ſtrong: their length being only two inches and a quarter; their circumference two inches: their color a pale blue; the outward toe turns eaſily back- Deſcr.

* *Turner* ſays it preys alſo on coots, and other water fowl.

† Pes ſiniſter ſubpalmatus. *Lin. ſyſt.* 91. No. 21.

ward

ward, and what merits attention, the claw belonging to it is larger than that of the inner toe; in which it differs from all other birds of prey; but ſeems peculiarly neceſſary to this kind, for the better ſecuring its ſlippery prey: the roughneſs of the ſoles of the feet contributes to the ſame end. The difference in weight, and other trifling particulars, makes us imagine that the bird Mr. *Willoughby* ſaw was a male; as the females of all the hawk kind, are larger, ſtronger, and fiercer than the males; the defence of their young, and the providing them food, reſting chiefly on them.

Theſe are the only ſpecies of eagles that we can, from our own knowlege, pronounce to be *Britiſh*; but, from the authority of Sir *Robert Sibbald*, and ſome other writers, we ſhall venture to add the figure and deſcription of the bird we ſuppoſe to be their *Erne*. The account and drawing is taken from a ſtuffed ſkin ſent us from *Norway*, which we believe to have been the ſame with the eagle that Sir *Robert* makes ſynonymous to his ſpecies.

BL



Paillou pinx.t Mazell Fec.t

V. The ERNE. *Tab.* 3.

Pygargus, or white tailed eagle. *Will. orn.* 61. *Raii syn. av.* 7.

Pygargus hinnularius, an *Erne. Sib. Scot.* 14.
Vultur albicilla. *Lin. syst.* 123.
Gamsen geyer. *Kram.* 326.

IT is inferior in size to the golden eagle: the beak, cere and irides are of a very pale yellow; the space between that and the eyes bare, and of a bluish color. The head and neck are of a pale ash color dashed with red, in some lighter, in others darker. The body and wings of a deep brown, the quil feathers very dark: the tail white: the legs feathered but little below the knees, and of a very light yellow. Descr.

The bill of this is rather straiter than is usual in the eagle, which seems to have induced *Linnæus* to place it among the *vultures*; but it can have no claim to be ranked with that genus, for the *pygargus* is wholly feathered; whereas, the characteristical mark of the vulture is, that the head and neck are either quite bare, or only covered with down.

Besides this species, *Sibbald** mentions another kind found in *Scotland*, under the name of *melainætos*, or the black eagle. *Martin*† describes the same species, which he says is small, but very destructive to deer; it will seize the deer between the horns, and by constantly beating it about the eyes with its wings, soon makes a prey of the harassed animal. The same writer speaks also of another kind of eagle of a large

* *Hist. Scot.* 14. † *Hist. West. Isles*, 37. 70.

size

ſize and grey color, a great deſtroyer of ſheep, lambs and fawns. Whether this is our *Erne*, we cannot determine from ſo obſcure a deſcription; but we flatter ourſelves that ſome commentator will ariſe to elucidate the works of theſe *Scotiſh* naturaliſts, who have dealt out their knowlege with ſo ſparing a hand, as to excite without ſatisfying our curioſity.

FALCONRY.

Falconry was the principal amuſement of our anceſtors: a perſon of rank ſcarce ſtirred out without his hawk on his hand; which, in old paintings, is the criterion of nobility. *Harold*, afterwards king of *England*, when he went on a moſt important embaſſy into *Normandy*, is painted embarking with a bird on his fiſt, and a dog under his arm *: and in an antient picture of the nuptials of *Henry* VI. a nobleman is repreſented in much the ſame manner †; for in thoſe days, *It was thought ſufficient for noblemen's ſons to winde their horn and to carry their hawk fair, and leave ſtudy and learning to the children of mean people* ‡. The former were the accompliſhments of the times; *Spenſer* makes his gallant Sir *Triſtram* boaſt,

> Ne is there hauke which mantleth her on pearch,
> Whether high towring, or accoaſting low,
> But I the meaſure of her flight doe ſearch,
> And all her pray, and all her diet know ‖.

In ſhort, this diverſion was, among the old *Engliſh*,

* *Monfaucon monumens de la monarchie françoiſe*, I. 372.
† *Mr. Walpole's anecdotes of painting*, I. 33.
‡ *Biog. Brit.* article *Caxton*.
‖ *Book* VI. *Canto* 2.

the

the pride of the rich, and the privilege of the poor, no rank of men ſeems to have been excluded the amuſement: we learn from the *book* of *St. Albans* *, that every degree had its peculiar hawk, from the *emperor* down to the *holy water clerk*. Vaſt was the expence that ſometimes attended this ſport; in the reign of *James* I. Sir *Thomas Monſon* † is ſaid to have given a thouſand pounds for a caſt of hawks: we are not then to wonder at the rigor of the laws that tended to preſerve a pleaſure that was carried to ſuch an extravagant pitch. In the 34th of *Edward* III. it was made felony to ſteal a hawk: to take its eggs, even in a perſon's own ground, was puniſhable with impriſonment for a year and a day; beſides a fine at the king's pleaſure: in queen *Elizabeth*'s reign the impriſonment was reduced to three months; but the offender was to find ſecurity for his good behaviour for ſeven years, or lie in priſon till he did. Such was the enviable ſtate of the times in *old England:* during the whole day our gentry were given to the fowls of the air, and the beaſts of the field: in the evening they celebrated their exploits with the moſt abandoned and brutiſh ſottiſhneſs: at the ſame time the inferior rank of people, by the moſt unjuſt and arbitrary laws, were liable to capital puniſhments, to fines, and loſs of liberty, for deſtroying the moſt noxious of the feathered tribe.

Our anceſtors made uſe of ſeveral kinds of native hawks; though that penetrating and faithful natura-

* A treatiſe on hunting, hawking and heraldry, printed at *St. Albans* by *Caxton*, and attributed to *Dame Julian Barnes*.

† Sir *Ant. Weldon*'s court of K. *James*. 105.

liſt

liſt Mr. *Ray*, has left us only the bare name of a falcon in his liſt of the *Engliſh* birds, without mentioning the ſpecies: our own enquiries have not been attended with any great ſucceſs; our diſcoveries only amounting to three kinds, to be deſcribed hereafter; but except the *Lanner*, none ſeem to have been noted among the *Britiſh* birds by any of our countrymen. The Falcon, Goſhawk, Lanner, Sacre, and the Gyr-falcon * are mentioned as natives, both in our old game law, and by ſeveral of our naturaliſts. *Camden* † alſo conjectures the ſpecies which *Henry* II. ſent for every year out of *Pembrokeſhire*, to have been the *Peregrine Falcon*; but notwithſtanding, we do not find their names in Mr. *Ray*'s liſt, (which is our authority for things not ſeen by ourſelves) yet we doubt not but they ſtill exiſt in theſe kingdoms, particularly in *Scotland*, which produces many birds in common with *Norway*; this we diſcovered in a large collection of thoſe of *Scandinavia*, preſented by Mr. *Fleiſcher* of *Copenhagen*: among which were ſome of the *falcon* tribe that are ranked as *Britiſh* by our old writers. We may here take notice that the *Norwegian* breed was, in old times, in high eſteem with our countrymen: they were thought bribes worthy a king. *Jeoffrey Fitzpierre* gave two good *Norway* hawks to king *John*, to obtain for his friend the liberty of exporting 100 weight of cheeſe: and *John*, the ſon of

* *Burn's juſtice. Carew's hiſt. Cornwall*, 25. *Sib. hiſt. Scot.* 14. *Merret's pinax*, 170.

† P. 758.—*Girald. Cambrenſis*, 156.—*Scotland*, the *Weſtern Iſles*, the *Orkneys*, and the *Iſle of Man*, have been much celebrated for their fine breed of hawks.

Ordgar,


Mazell fec.

Ordgar, fined to *Richard* I. in one *Norway* hawk, to gain the royal intereſt in a certain affair *.

Among the falcons, we owe to the generoſity of Mr. *Fleiſcher*, were two which we believe to be alſo natives of our own country; and theſe we venture to deſcribe and figure in this work as ſuch, on the authorities above mentioned.

VI. The GYRFALCON. *Tab.* 4.

Le Gerfault. *Belon av.* 94.
Gyrfalco. *Aldr. av.* I. 243.
Jer-falcon. *Wil. orn.* 78.
Gyrfalco. *Raii ſyn. av.* 13.
F. Iſlandus albus. *Brunnich* 7. 8.
Le Gerfault. *Briſſon av.* I. 370.
Sib. Scot. 14.
Charlton Ex. 317.

Deſcr. THIS elegant ſpecies is not much inferior in ſize to the *Oſprey*. The bill is very much hooked and yellow; the throat of a pure white: the whole plumage is of the ſame color, but marked with duſky lines, ſpots or bars. The head, breaſt and belly with narrow lines, thinly ſcattered and pointing down. The wings with large heart-ſhaped ſpots; the middle feathers of the tail with a few bars: the feathers on the thighs are very long, and of a pure white; the legs yellow, and feathered a little below the knees. This kind is ſometimes found quite white; it was a bird in high eſteem when falconry was in vogue, and uſed for the nobleſt game, ſuch as cranes and herons.

This is the *Gyrfalco* of all the ornithologiſts except *Linnæus*, whoſe bird we are totally unacquainted with: though he gives ſeveral of their ſynonyms, his deſcription differs entirely from each of them.

* *Madox's Antiq. Excheq.* 325. 332.

VII. The PEREGRINE FALCON.

Belon av. 116.
Falco peregrinus niger. *Aldr. av.* I. 239.
Blue backed falcon. *Charl. Ex.* 73.
Ditto. *Br. Zool. tab.* A *. 5.
Sparviere pellegrino femmina. *Lorenzi av. tab.* 24.
Le Faucon pelerin. *Briſſon av.* I. 341.

THIS ſpecies was ſhot in *Northamptonſhire*, and communicated to us by Mr. *Grace*, of *Throgmorton Street*.

Deſcr. In ſize it was equal to the moor-buzzard: the bill ſtrong, ſhort, and very much hooked, armed near the end of the upper mandible with a very ſharp proceſs: blue at the baſe, black at the point.

The feathers on the forehead were whitiſh: the crown of the head black mixed with blue: the hind part of the neck black: the back, ſcapulars, and covert of the wings, elegantly barred with deep blue and black. The quil feathers duſky, marked with elliptical white ſpots placed tranſverſe: the tail barred with numerous ſtrokes of duſky and blue: the throat white: the forepart of the neck, and upper part of the breaſt white ſlightly tinged with yellow, the laſt marked with a few ſmall duſky lines pointing downwards. The reſt of the breaſt, the belly, thighs and vent feathers, white inclining to grey, and croſſed with duſky ſtrokes pointed in their middle. The tail conſiſts of feathers of equal length, finely and frequently barred with blue and black. The legs ſhort and yellow.

According to Signor *Lorenzi*, this bird is the female

male peregrine falcon: he has figured the male in his twenty-third plate, and made all its colors darker, and the upper part of the body and the head almoſt black. The fore part of the neck, the breaſt and belly agree with the female.

We received, a few years ago, a young bird of this ſpecies from the rocks of *Llandidno* in *Caernarvonſhire*. That promontory has been long famed for producing a generous breed of falcons, as appears by a letter extant in *Gloddaeth* library, from the lord treaſurer *Burleigh* to an anceſtor of Sir *Roger Moſtyn*, in which his lordſhip thanks him for a preſent of a fine caſt of hawks taken on thoſe rocks, which belong to the family.

VIII. The GREY FALCON.

Br. Zoology 65.

THIS kind was ſhot near *Halifax* 1762, and the following account tranſmitted to us by Mr. *Bolton*, of *Worly-clough*. This bird was about the ſize of a raven: the bill was ſtrong, ſhort, much hooked, and of a bluiſh color: the cere, and edges of the eyelids yellow: the irides red: the head was ſmall, flatted at the top; the fore part of a deep brown; the hind part white: the ſides of the head and throat were creme colored: the belly white, marked with oblong black ſpots: the hind part of the neck, and the back were of a deep grey: the wings were very long, and when cloſed reached beyond the train: the Deſcr.

firſt of the quil feathers were black, with a white tip; the others were of a bluiſh grey, and their inner webs irregularly ſpotted with white: the tail was long, and wedge ſhaped; the two middle feathers being the longeſt, were plain, (the color not mentioned) the reſt ſpotted: the legs were long, naked, and yellow.

IX. The LANNER.

The Lanner. *Will. orn.* 82.
Lanarius. *Raii ſyn. av.* 15.
Falco Lanarius. *Lin. ſyſt.* 129.
Faun. Suec. ſp. 62.

THIS ſpecies breeds in *Ireland:* the bird our deſcription is taken from, was caught in a decoy in *Lincolnſhire*, purſuing ſome wild ducks under the nets, and communicated to us by *Taylor White* Eſq; under the name of the *Lanner*.

Deſcr. It was leſs than the buzzard. The cere was of a pale greeniſh blue: the crown of the head of a brown and yellow clay color: above each eye, to the hind part of the head, paſſed a broad white line; and beneath each, a black mark pointing down: the throat white: the breaſt tinged with dull yellow, and marked with brown ſpots pointing downwards: the thighs and vent ſpotted in the ſame manner: back and coverts of the wings deep brown, edged with a paler: quil feathers duſky: the inner webs marked with oval ruſt colored ſpots: the tail was ſpotted like the wings.

The legs ſhort and ſtrong, and of a bluiſh caſt, which Mr. *Willoughby* ſays, are the characters of that bird.

bird. We are here to obſerve, that much caution is to be uſed in deſcribing the hawk kind, no birds being ſo liable to change their colors the two or three firſt years of their lives: inattention to this has cauſed the number of hawks to be multiplied far beyond the reality: the marks to be attended to as forming the characters of the ſpecies, are thoſe on the quil feathers and the tail, which do not change; another reaſon for this needleſs increaſe of the ſpecies of this tribe of birds, is owing to the names given to the ſame kinds in different periods of their lives, by the writers on falconry, which ornithologiſts have adopted and deſcribed as diſtinct kinds: even Mr. *Ray* has been obliged to copy them. The falcon, the falcon gentle, and the haggard, are made diſtinct ſpecies, whereas they form only one: this is explained by a *French* author, who wrote in the beginning of the laſt century, and effectually clears up this point; ſpeaking of the falcon, he tells us, " S'il eſt prins en " *Juin*, *Juillet* & *Aouſt*, vous le nommerez *Gentil*: " ſi en *Septembre*, *Octobre*, *Novembre* ou *Decembre*, " vous le nommerez *Pellerin* ou *Paſſager*: s'il eſt " prins en *Janvier*, *Feburier* et *Mars*, il ſera nommé " *Antenere*: et apres eſtre muë une fois et avoir " changé ſon cerceau, non auparavant, vous le dires " *Hagar*, mot *Hebrieu*, qui ſignifie eſtranger *.

* *La fauconnerie de Charles d'Arcuſſia ſeigneur d'Eſparron, p.* 14. 5me *edit. Paris* 1607.

X. The GOSHAWK. *Tab.* 5.

Autour. *Belon av.* 1 2.
Geſner av. 5.
Aldr. av. i. 181.
Sib. Scot. 15.
Goſhawk, accipiter palumbarius. *Wil. orn.* 85.
Raii ſyn. av. 18.
L'Autour, Aſtur. *Briſſon av.* i. 317.
Aſtore. *Zinan.* 87.
Falco palumbarius. *Lin. ſyſt.* 130.

Deſcr. THE goſhawk is larger than the common buzzard, but of a longer and more elegant form. The bill is blue towards the baſe, black at the tip; the cere a yellowiſh green: over each eye is a white line; and on the ſide of the neck is a bed of broken white: the head, hind part of the neck, back and wings are of a deep brown color: the breaſt and belly white, beautifully marked with numerous tranſverſe bars of black and white: the tail is long, of a browniſh aſh color, marked with four or five duſky bars placed remote from each other.

This ſpecies and the ſparrow hawk, are diſtinguiſhed by Mr. *Willoughby* by the name of ſhort winged hawks, becauſe their wings, when cloſed, fall ſhort of the end of the tail.

The goſhawk was in high eſteem among falconers, and flown at cranes, geeſe, pheaſants and partridges.

XI. The

The GOSHAWK.



XI. The KITE.

Le Milan royal. *Belon av.* 129.
Milvus. *Geſn. av.* 609.
Glede, Puttok, Kyte *Turneri.*
Milvio, Nichio. *Ald. av.* i. 201.
Kite, or Glead. *Wil. orn.* 74.
Milvus. *Plinii lib.* x. *c.* 10.
Raii ſyn. av. 17.
Rother milon. *Kram.* 326.
Falco milvus. *Lin. ſyſt.* 126.
Glada. *Faun. Suec. ſp.* 57.
Le Milan royal. *Briſſon av.* i. 414. *Tab.* 33.
Nibbio. *Zinan.* 82.
The Kite. *Br Zool.* 66. *Tab.* A 2.
Glente. *Brunnich* 3.

THE kite generally breeds in large foreſts, or wooded mountaneus countries: it lays two, or at moſt three eggs: which, like thoſe of all other birds of prey, are much rounded, and very blunt at the ſmaller end; they are white of color, and ſpotted with a dirty yellow: its motion in the air diſtinguiſhes it from all other birds; being ſo ſmooth and even, as to be ſcarce perceptible; ſometimes it will remain quite motionleſs for a conſiderable ſpace; at others glides through the ſky, without the leſt apparent action of its wings: from thence is derived the old name of Glead, or Glede, from the *Saxon* Glida. Lord *Bacon* obſerves, that when kites fly high, it portends fair and dry weather. Some have ſuppoſed theſe to be birds of paſſage; but in *England* they certainly continue the whole year.

The tail of this kind is ſufficient to diſtinguiſh it from all other *Britiſh* birds of prey, being forked. *Pliny* thinks that the invention of the rudder aroſe from the obſervation men made of the various motions of that part, when the kite was ſteering through

the air *. Certain it is that the moſt uſeful arts were originally copied from animals; however we may now have improved upon them. Still in thoſe nations which are in a ſtate of nature, (ſuch as the *Samoieds* and *Eſquimaux*) their dwellings are inferior to thoſe of the beavers, which thoſe ſcarcely human beings but poorly copy.

Deſcr. The weight of this ſpecies is forty-four ounces: the length twenty-ſeven: the breadth five feet one inch: the bill is two inches long, and very much hooked at the end. The cere yellow: the head and chin are of a light grey, in ſome, white, marked with oblong ſtreaks of black: the neck and breaſt are of a tawny red, but the middle of the feathers black. On the belly and thighs, the ſpots are fewer, and under the tail they almoſt vaniſh. The back is brown. The five firſt quil feathers are black: the inner webs of the others blotched with white: the coverts of the wings are varied with tawny black and white: the tail is forked, and of a tawny red: the outmoſt feather on each ſide of a darker hue than the reſt: the thighs are covered with very long feathers: the legs are yellow and ſtrong: the irides of a pale yellow.

Theſe birds differ in their colors. We have ſeen a beautiful variety ſhot in *Lincolnſhire* that was entirely of a tawny color.

* Iidem videntur artem gubernandi docuiſſe caudæ flexibus. *Lib.* 10. *c.* 10.

XII. The

XII. The Common BUZZARD.

Le Buſe, ou Buſard. *Belon av.* 100.
Buteo. *Geſner. av.* 46.
Buſharda *Turneri.*
Buteo, ſeu Triorches. *Ald. av.* I. 190.
Triorches, Buteo. *Plinii lib.* 10. c. 7.
Raii ſyn. av. 16.
Common Buzzard, or Puttock, *Wil. orn.* 70.
Wald Geyer, *Kram.* 329.
Falco buteo. *Lin. ſyſt.* 127.
Quidfogel. *Faun. Suec. ſp.* 60.
La Buſe. *Briſſon av.* I. 406.
Pojana. *Zinan.* 85.
Br. Zool. 66. *Tab.* A. 3.
Oerne Falk. *Brunnich* p. 5.

THIS bird is the commoneſt of the hawk kind we have in *England.* It breeds in large woods, and uſually builds on an old crow's neſt, which it enlarges and lines with wool, and other ſoft materials: it lays two or three eggs, which are ſometimes wholly white; ſometimes ſpotted with yellow. The cock buzzard will hatch and bring up the young, if the hen is killed *. The young conſort with the old ones for ſome little time after they quit the neſt; which is not uſual with other birds of prey, who always drive away their brood as ſoon as they can fly. This ſpecies is very ſluggiſh and inactive; and is much leſs in motion than other hawks, remaining perched on the ſame bough for the greateſt part of the day, and is found at moſt times near the ſame place. It feeds on birds, rabbets, moles and mice; it will alſo eat frogs, earth-worms and inſects. This bird is ſubject to ſome variety in its colors: we have Deſcr.

* *Ray's Letters* 352.

ſeen ſome whoſe breaſt and belly were brown, and only marked croſs the craw with a large white creſcent: uſually the breaſt is of a yellowiſh white, ſpotted with oblong ruſt-colored ſpots, pointing downwards: the chin ferruginous: the back of the head and neck, and the coverts of the wings are of a deep brown, edged with a pale ruſt color: the ſcapular feathers brown; but white towards their roots: the middle of the back is covered only with a thick white down: the ends of the quil feathers are dusky; their lower exterior ſides aſh-colored: their interior ſides blotched with darker and lighter ſhades of the ſame: the tail is barred with black and aſh-color: the bar next the very tip is black, and the broadeſt of all; the tip itſelf of a dusky white. The irides are white, tinged with red. The weight of this ſpecies is thirty-two ounces: the length twenty-two inches; the breadth fifty-two.

XIII. The

XIII. The Honey BUZZARD.

Le Goiran, ou Bondrèe. *Belon av.* 101.
Ald. av. 1. 191.
Honey-Buzzard. *Wil. orn.* 72. *Raii syn. av.* 16.
Frosch-geyerl. *Kram.* 331.
Falco Apivorus. *Lin. syst.* 130.
Slag-hok. *Faun. Suec. sp.* 65.
La Bondrèe. *Brisson av.* 1. 410. *Zinan.* 84.
Br. Zool. 67. *Tab.* A. 4. A*. 4.
Muse-Hoeg, Muse-Baage, *Brunnich* p. 5.

THE weight of this species is thirty ounces: the length twenty-three inches: the breadth fifty-two: the bill and cere are black; the latter much wrinkled: the irides of a fine yellow: the crown of the head ash-colored: the neck, back, scapulars, and covert feathers of the wings, are of a deep brown: the chin is white; the breast and belly of the same color, marked with dusky spots pointing downwards. The tail is long, of a dull brown color, marked with three broad dusky bars; between each of which are two or three of the same color, but narrower: the legs are short, strong, and thick: the claws large and black. Descr.

After the publication of the *Zoology*, Mr. *Plymly* favored us with a variety of this species, engraved in the additional plates of the *Zoology*, supposed to be a female, being shot on the nest: it was entirely of a deep brown color, but had much the same marks on the wings and tail as the male; and the head was tinged with ash color. There were two eggs in the nest, blotched over with two reds something darker than those of the kestril; though Mr. *Willoughby* says they are of a different color: that naturalist informs us, that this bird builds its nest with small twigs, which

it

it covers with wool; that its eggs are cinereous, marked with darker ſpots: as he found the combs of waſps in the neſt, he gave this ſpecies the name of the honey buzzard: he adds, that it feeds on the eruceæ of thoſe inſects, on frogs, lizards, &c. and that it runs very ſwiftly like a hen.

XIV. The Moor BUZZARD.

Le fau-Perdrieux. *Belon av.* 114.
Circus Accipiter. *Geſner av.* 49.
Milvus æruginoſus. *Ald. av.* i. 203.
Moor Buzzard. *Wil. orn.* 75. *Raii ſyn. av.* 17.
Brauner rohr Geyer. *Kram.* 328.
Falco æruginoſus. *Lin. ſyſt.* 91.
Hoenſ-tjuf. *Faun. Suec. ſp.* 66.
Pojana roſſa. *Zinan.* 83.
Le Buſard de marais. *Briſſon av.* i. 401.
Hoenſe Hoeg. *Brunnich* p. 5.
Br. Zool. 67. *Tab.* A. 5.

THIS ſpecies frequents moors, marſhy places, and heaths; it never ſoars like other hawks; but commonly ſits on the ground, or on ſmall buſhes: it makes its neſt in the midſt of a tuft of graſs or ruſhes: we have found three young ones in it, but never happened to meet with the eggs: it is a very fierce and voracious bird, and is a great deſtroyer of rabbets, young wild ducks, and other water fowl.

Deſcr. Its uſual weight is twenty ounces: the length twenty-one inches: the breadth four feet three inches: the bill is black, cere yellow; irides of the ſame color: the whole bird, head excepted, is of a chocolate brown, tinged with ruſt color: on the head is a large yellowiſh ſpot; we have ſeen ſome birds of this kind with their head and chin entirely white; the others again have a whitiſh ſpot on the coverts of

* In ſome places it is called the *duck hawk*.

their

their wings; but theſe are only to be deemed varieties. The uniform color of its plumage, and the great length and ſlenderneſs of its legs, diſtinguiſhes it from all other hawks.

XV. The HEN-HARRIER. *The Male.*

The RING-TAIL. *The Female.*

Jan le Blanc, ou Oyſeau Sainct Martin. *Belon av.* 103. *the male.*
Un Autre Oyſeau Sainct Martin. *Belon av.* 104. *the female.*
Subbuteo. *Geſner av.* 48.
Subbuteo *Turneri. the female.* Rebetarius. *the male.*
Lanarius albus. *Aldr. av.* i. 197.
Wil. orn. 70.
Raii ſyn. av. 17.
Blue Hawk. *Edw.* 225. *the male.*
Falco Pygargus, Falco Cyaneus, le Faucon a Collier. *Briſſon av.* i. 345. *the fem.*
Le Lanier cendrè. *Briſſon av.* i. 365. *the male.*
Br. Zool. 68. *Tab. A.* 6. *A.* 7.
Brunnich 14.

THE male, or the hen-harrier, weighs about twelve ounces: the length is ſeventeen inches; the breadth three feet three inches: the bill is black: cere, irides, and edges of the eye-lids yellow: the head, neck, back, and coverts of the wings, are of a bluiſh grey: the back of the head white, ſpotted with a pale brown: the breaſt, belly, and thighs, are white: the former marked with a few ſmall duſky ſtreaks: the ſcapular feathers are of a deep grey, inclining to duſky: the two middle feathers of the tail are entirely grey; the others only on their exterior webs; the interior being white, marked with Deſcr.

ſome

ſome duſky bars: the legs are yellow, long and ſlender.

Deſcr. The female weighs ſixteen ounces; is twenty inches long; and three feet nine inches broad: on the hind part of the head, round the ears to the chin, is a wreath of ſhort ſtiff feathers of a dusky hue, tipt with a reddiſh white: on the top of the head, and the cheeks, the feathers are duſky, bordered with ruſt color; under each eye is a white ſpot: the back is duſky; the rump white, with oblong yellowiſh ſpots on each ſhaft; the tail is long, and marked with alternate bars of duſky and tawny; of which the dusky bars are the broadeſt; the breaſt and belly are of a yellowiſh brown, with a caſt of red, and marked with oblong dusky ſpots: but we have met with one ſpecimen that had thoſe parts entirely plain. The legs in color and ſhape reſemble thoſe of the male. Theſe birds fly very low, skimming the ſurface of the ground; and are very deſtructive to our young poultry: they lay four eggs, beſmeared over with red, a little white appearing here and there.

XVI. The

XVI. The KESTRIL.

La Crefferelle. *Belon av.* 125. *Geſner av.* 54.
Kiſtrel, Kaſtrel, or Steingal *Turneri. Aldr. av.* 188.
The Keſtril, Stannel, Stonegall, Windhover. *Wil. orn.* 84. *Raii ſyn. av.* 16.
La Crefferelle. *Briſſon av.* i. 393.
Windwachl, Rittlweyer, Wannenweher. *Kram.* 331.
Falco tinnunculus. *Lin. ſyſt.* 127.
Kyrko-Falk. *Faun. Suec. ſp.* 61.
Kirke-Falk. *Brunnich* 4. 5.
Gheppio, Acertello, Gavinello. *Zinan.* 88.
Br. Zool. 68. plate A.

THE male of this beautiful ſpecies weighs only ſix ounces and a half: its length is fourteen inches: the breadth two feet three inches: its colors at once diſtinguiſh it from all other hawks: the crown of the head, and the greater part of the tail, are of a fine light grey, the lower end of the latter is marked with a broad black bar: the tip is white: the back and coverts of the wings are of a purpliſh red, elegantly ſpotted with black: the interior ſides of the quil feathers are dusky, deeply indented with white. Deſcr.

The female weighs eleven ounces: the color of the back and wings are far leſs bright than thoſe of the male: it differs too in the colors of the head and tail; the former being of a pale reddiſh brown, ſtreaked with black; the latter of the ſame color, marked with numerous tranſverſe black bars: the breaſt is of a dirty yellowiſh white; and the middle of each feather has an oblong dusky ſtreak, pointing downwards.

The keſtril breeds in the hollows of trees, in the holes of high rocks, towers and ruined buildings: it lays

lays four eggs, of the ſame color with thoſe of the preceding ſpecies: its food is field mice, ſmall birds and inſects; which it will diſcover at a great diſtance. This is the hawk that we ſo frequently ſee in the air fixed in one place, and as it were fanning it with its wings; at which time it is watching for its prey. When falconry was in uſe in *Great-Britain*, this kind was trained for catching ſmall birds and young partridges.

XVII. The HOBBY.

Le Hobreau. *Belon av.* 118.
Geſner av. 75. *fæm.*
Hobbia *Turneri.*
Æſalon. *Aldr. av.* i. 187.
The Hobby. *Wil. orn.* 83.
Le Hobreau, Dendro-falco. *Briſſon av.* i. 375.
Raii ſyn. av. 15.
Falco ſubbuteo. *Lin. ſyſt.* 127.
Faun. Suec. ſp. 59.
Barletta. *Lorenzi av.* 45.
Laerke-Falk. *Brunnich* 10. 11.
Br. Zool. 69. plate A. 9.

THIS bird was alſo uſed in the humbler kind of falconry; particularly in what was called daring of larks: the hawk was caſt off; the larks aware of their moſt inveterate enemy, are fixed to the ground through fear; which makes them a ready prey to the fowler, by drawing a net over them. Mr. *Willaughby* ſays that the hobby is a bird of paſ-
Deſcr. ſage; but that it breeds in *England*. The male weighs ſeven ounces: the length is one foot; the breadth two feet three inches: the crown of the head and back are of a deep bluiſh black: the hind part of the head is marked with two pale yellow ſpots; each cheek with a large black one pointing downwards: the coverts of the wings are of the ſame color

with

with the back, but ſlightly edged with ruſt color: the interior webs of the ſecondary and quil feathers, are varied with oval tranſverſe reddiſh ſpots: the two middle feathers of the tail are entirely of a deep dove color: the others are barred on their interior ſides with ruſt color, and tipt with a dirty white. The ſpots on the breaſt of the female are of a higher color than thoſe of the male: it is greatly ſuperior in ſize, its legs have a tinge of green, in other reſpects it reſembles the former.

XVIII. The SPARROW HAWK.

L'Eſpervier. *Belon av.* 121.
Geſner av. 51.
Sparhauc *Turneri.*
Accipiter fringillarius, ſparviero. *Aldr. av.* i. 183.
Wil. orn. 86.
L'Epervier, accipiter. *Briſſon av.* i. 310.
Raii ſyn. av. 18.
Kram. 332.
Falco niſus. *Lin. ſyſt.* 130.
Sparſhoek. *Faun. Suec. ſp.* 69.
Spurre-hoeg. *Brunnich p.* 5.
Br. Zool. 69. plate A. 10. A. 11.

THE difference between the ſize of the male and female ſparrow hawks, is more diſproportionate than in moſt other birds of prey; the former ſometimes ſcarce weighing five ounces, the latter nine ounces: the length of the male is about twelve inches, the breadth twenty-three: the female is fifteen inches long; in breadth twenty-ſix. Deſcr.

Theſe birds, as well as the hawk kind in general, vary greatly in their colors; in ſome, the back, head, coverts of the wings and tail, are of deep bluiſh grey; in others of a deep brown, edged with a ruſty red: the

quil feathers are dusky, barred with black on their exterior webs, and ſpotted with white on the lower part of their inner webs: the tail is of a deep aſh color marked with five broad black bars, the tip white: the breaſt and belly are of a whitiſh yellow, adorned with tranſverſe waved bars; in ſome of a deep brown color, in others orange: the cere, irides, and legs yellow. The colors of the female differ from thoſe of the male: the head is of a deep brown; the back, and coverts of the wings, are dusky mixed with dove color; the coverts of the tail of a brighter dove color; the waved lines that croſs the breaſt, are more numerous than thoſe on that of the male; and the breaſt itſelf of a purer white.

This is the moſt pernicious hawk we have; and makes great havoke among pigeons, as well as partridges. It builds in hollow trees, and large ruins, and in high rocks: lays four white eggs, encircled near the blunter end with red ſpecks. Mr. *Willoughby* places this among the ſhort-winged hawks; or ſuch whoſe wings, when cloſed, fall ſhort of the end of the tail.

XIX. The

XIX. The MERLIN*.

L'Eſmerillon. *Belon av.* 118.
Æſalon. *Geſner av.* 44.
Merlina *Turneri.*
Smerlus, Smerillus, *Aldr. av.* i. 187.
Will. orn. 85.
Raii ſyn. av. 15.
L'Emerillon. *Briſſon av.* i. 382.
Smerlio, o Smeriglio. *Lorenzi av. tab.* 18. 19.
Br. Zool. 70. plate A. 12.

THE Merlin weighs near five ounces and a half: its length is twelve inches, its breadth twenty-five. The bill is of a bluiſh lead color: the cere of a lemon color: the irides very dark, almoſt black: the head is ferruginous, and each feather is marked with a bluiſh black ſtreak along the ſhaft: the back and wings are of a deep bluiſh aſh color, adorned with ferruginous ſtreaks and ſpots, and edged with the ſame: the quil feathers are almoſt black, marked with reddiſh ſpots: the under coverts of the wings brown, beautifully marked with round white ſpots: the tail is five inches long, croſſed with alternate bars of dusky and reddiſh clay color: on ſome of the the feathers of the ſame bird are thirteen, on ſome fifteen: the breaſt and belly are of a yellowiſh white, marked with oblong brown ſpots pointing downwards: the legs yellow: the wings when cloſed reach within an inch and a half of the end of the tail. This and the preceding kind were often trained for hawking: and this ſpecies, ſmall as it is, was inferior to none in point of ſpirit: it was uſed for taking partridges, which it would kill by a ſingle Deſcr.

* Merularius; quia merulas inſectatur. *Skinner.*

ſtroke on the neck. The Merlin flies low, and is often ſeen along roads ſides, skimming from one ſide of the hedges to the other, in ſearch of prey.

It was known to our *Britiſh* anceſtors by the name of *Llamyſden*; was uſed in hawking; and its neſt was valued at twenty-four pence. They made uſe of four other ſpecies, but have left us only their names; the *Hebog* or *Hawk*, whoſe neſt was eſtimated at a pound; the *Gwalch*'s or *Faulcon*'s at one hundred and twenty pence; the *Hwyedig*'s or *long winged*, at twenty-four pence; and a ſpecies called *Cammin* or *crooked bill*, at four pence. The *Penhebogyd* or *chief falconar*, held the fourth place at the court of the *Welch* prince: but notwithſtanding the hoſpitality of the times, this officer was allowed only three draughts out of his horn, leaſt he ſhould be fuddled and neglect his birds *.

* *Leges Wallicæ*, 253. 25.

Genus

Genus II. OWLS.

EARED OWLS.

Species I. The LONG EARED OWL.

L'Hibou cornu. *Belon av.* 136.
Geſner av. 635.
Aſio, ſeu otus. *Aldr. av.* i. 265.
The horn Owl. *Wil. orn.* 100.
Raii ſyn. av. 25.
Noctua aurita. *Sib. Scot.* 14.
Strix otus. *Lin. ſyſt.* 132.
Le moyen Duc ou le Hibou. *Briſſon av.* i. 486.
Horn-uggla. *Faun. Suec. ſp.* 71.
Haſſelquiſt itin. 233.
Horn Ugle. *Brunnich* 16.
Horn-eule. *Kram.* 323.
Br. Zool. Plate B. 4. f. 1.

THIS ſpecies is found, though not frequently, in the north of *England*, in *Cheſhire* and in *Wales*: the weight of the female, according to Mr. *Willoughby*, (for we never had opportunity of weighing it) is ten ounces: the length fourteen inches and a half: the breadth three feet four inches: the irides are of a bright yellow: the bill black: the circle of feathers ſurrounding the eyes is white tipt with reddiſh and duſky ſpots, and the part next the bill black: the breaſt and belly are of a dull yellow, marked with ſlender brown ſtrokes pointing downwards: the thighs and vent feathers of the ſame color, but unſpotted. The back and coverts of the wings are varied with deep brown and yellow: the quil feathers of the ſame color, but near the ends of the outmoſt is a broad bar of red: the tail is marked with duſky and reddiſh bars, but beneath appears aſh colored: the Deſcr.

horns or ears are about an inch long, and conſiſt of ſix feathers variegated with yellow and black: the feet are feathered down to the claws.

II. The SHORT EARED OWL.

Br. Zool. 71. *Tab.* B. 3. and B. 4. Fig 2.

THE horns of this ſpecies are very ſmall, and each conſiſts of only a ſingle feather; theſe it can raiſe or depreſs at pleaſure; and in a dead bird they are with difficulty diſcovered. This kind is ſcarcer than the former; but like it is found in the mountanous wooded parts of our iſland: both are ſolitary birds, avoiding inhabited places. Theſe ſpecies may be called long winged owls; the wings when cloſed reaching beyond the end of the tail; whereas in the common kinds, they fall ſhort of it.

Deſcr. The length of the ſhort eared owl is thirteen inches and a half: the head is ſmall and hawk-like: the bill is duſky: the circle of feathers that immediately ſurrounds the eyes is black: the larger circle white, terminated with tawny: the feathers on the head, back, and coverts of the wings are brown edged with pale dull yellow: the breaſt and belly are of the ſame color, marked with a few long narrow ſtreaks of brown pointing downwards: the thighs, legs and toes are covered with plain yellow feathers: the quill feathers are duſky, barred with red: the tail is of a very deep brown, adorned on each ſide the ſhaft of each

each feather with a yellow circle which contains a brown spot: the tip of the tail is white.

Besides these two species of horned owls, we may add the great horn owl of Sir *R. Sibbald*, p. 15. found, according to his account, in the *Orkneys*: the great eagle owl has been once shot in *Yorkshire*; but we cannot, from these two instances, determine whether they are natives of this kingdom, or only accidental wanderers out of *Scandinavia*. This short eared species we believe to be nondescript.

OWLS WITH SMOOTH HEADS.

III. The WHITE OWL.

Belon av. 143 *.
Aluco minor. *Aldr. av.* i. 272.
Common barn, white, or church Owl, Howlet, madge Howlet, Gillihowter. *Wil. orn.* 104. *Raii syn. av.* 25.
Le petit Chat-huant. *Brisson av.* i. 503.
Allocco, *Zinan.* 99.
Strix flammea. *Lin. syst.* 133. *Faun. Suec.* 73.
Br. Zool. 71. plate B.

THIS species is almost domestic: inhabiting for the greatest part of the year, barns, haylofts, and other outhouses; and is as useful in clearing those places from mice, as the congenial cat: towards twilight it quits its perch, and takes a regular circuit round the fields; skimming along the ground in quest of field mice, and then returns to its usual residence: in the breeding season it takes to the woods.

The elegant plumage of this bird makes amends for the uncouthness of its form: a circle of soft white feathers surround the eyes. The upper part of the Descr.

* This refers only to the figure, for his description means the *Goatsucker*.

body, the coverts and ſecondary feathers of the wings are of a fine pale yellow: on each ſide the ſhafts are two grey and two white ſpots placed alternate: the exterior ſides of the quil feathers are yellow; the interior white, marked on each ſide with four black ſpots: the lower ſide of the body is wholly white: the interior ſides of the feathers of the tail are white: the exterior marked with ſome obſcure duſky bars: the legs are feathered to the feet: the feet are covered with ſhort hairs: the edge of the middle claw is ſerrated: the uſual weight of this ſpecies is eleven ounces: its length fourteen inches: its breadth three feet.

IV. The TAWNY OWL.

Ulula. *Geſner av.* 773.
Strix. *Aldr. av.* i. 285.
Common brown or ivy Owl. *Wil. orn.* 102.
Raii ſyn. av. 25.
Le Chat huant. *Briſſon av.* i. 500.
Strige. *Zinan* 100.
Strix ſtridula. *Lin. Syſt.* 133.
Skrik uggla. *Faun. Suec.* 77.
Strix Orientalis. *Haſſelquiſt itin.* 233.
Nacht Eule, Gemeine. *Kram.* 324.
Nat Ugle. *Brunnich* 18.
Br. Zool. 72. plate B. 3.

Deſcr. THE female of this ſpecies weighs nineteen ounces: the length is fourteen inches: the breadth two feet eight inches: the irides are dusky: the ears in this, as in all owls, very large; and their ſenſe of hearing very exquiſite. The color of this kind is ſufficient to diſtinguiſh it from every other: that of the back, head, coverts of the wings, and on the ſcapular feathers, being a fine tawny red, elegantly ſpotted and powdered with black or dusky ſpots of various ſizes: on the coverts of the wings,

and on the ſcapulars, are ſeveral large white ſpots: the coverts of the tail are tawny, and quite free from any marks: the tail is variouſly blotched, barred and ſpotted with pale red and black; in the two middle feathers the red predominates: the breaſt and belly are yellowiſh, mixed with white, and marked with narrow black ſtrokes pointing downwards: the legs are covered with feathers down to the toes.

V. The BROWN OWL.

The grey Owl. *Wil. orn.* 103.
Raii ſyn. av. 26.
La Hulote. *Briſſon av.* I. 507.
Strix Ulula. *Lin. ſyſt.* 133.
Faun. Suec. 78.
Ugle. *Brunnich* 19.
Br. Zool. 72. Plate B. 1.

AS the names this and the precedent ſpecies bear do by no means ſuit their colors, we have taken the liberty of changing them to others more congruous. Both theſe kinds agree entirely in their marks; and differ only in the colors; in this the head, wings and back are of a deep brown, ſpotted with black in the ſame manner as the former; the Deſcr. coverts of the wings and the ſcapulars are adorned with ſimilar white ſpots: the exterior edges of the four firſt quil feathers in both are ſerrated: the breaſt in this is of a very pale aſh color mixed with tawny, and marked with oblong jagged ſpots: the feet too are feathered down to the very claws: the circle round the face is aſh-colored, ſpotted with brown.

Both theſe ſpecies inhabit woods, where they reſide the whole day; in the night they are very clamorous;

approach our dwellings; and will frequently enter pigeon houſes, and make great havoke in them. Theſe breed in hollow trees, or ruined edifices; lay four eggs of an elliptic form, and of a whitiſh color.

VI. The LITTLE OWL.

La Cheveche, *Belon av.* 140.
Noctua. *Geſner av.* 620.
Little Owl. *Wil. orn.* 105.
Raii ſyn. av. 26.
Edw. 228.
Tſchiavitl. *Kram.* 324.
Faun. Suec. 79.
La petite Chouette, ou la Cheveche. *Briſſon av.* i. 514.
Strix paſſerina. *Lin. ſyſt.* 133.
La Civetta. *Olina* 65.
Krak-Ugle. *Brunnich* 20.
Br. Zool. 73. plate B. 5.

THIS elegant ſpecies is very rare in *England*; it is ſometimes found in *Yorkſhire*, *Flintſhire*, and alſo near *London*: in ſize it ſcarcely exceeds a Deſcr. thruſh, though the fullneſs of its plumage makes it appear larger: the irides are of a light yellow: the bill of a paler color: the feathers that encircle the face are white, tipt with black: the head brown ſpotted with white: the back, and coverts of the wings are of a deep olive brown; the latter ſpotted with white: on the breaſt is a mixture of white and brown: the belly is white, marked with a few brown ſpots: the tail is of the ſame color with the back: in one ſubject we ſaw, each feather was barred with white: in another, each was adorned with circular white ſpots, placed oppoſite one another on both ſides the ſhaft: the legs and feet are covered with feathers down to the claws.

The *Italians* made uſe of this owl to decoy ſmall birds to the limed twig: the me thod of which is exhibited in *Olina's uccelliera*, p. 65.

Genus

Genus III. BUTCHER BIRDS.

Species I. GREAT ASH COLORED BUTCHER BIRD.

La grande Pie griesche. *Belon av.* 126.
Lanius cinereus. *Gesner av.* 579.
Skrike, nyn murder. *Turneri.*
Lanius cinereus, Collurio major. *Aldr. av.* i. 199.
Castrica, Ragastola. *Olina* 41.
Greater Butcher Bird, or Mattagess; in the *North of England*, Wierangle. *Wil. orn.* 87.
Raii syn. av. 18.
Speralster, Grigelalster, Neuntodter. *Kram.* 364.
Butcher Bird, Murdering Bird or Skreek. *Mer. Pinax* 170.
Cat. Carol. app. 36.
Night Jar. *Mort. Northampt.* 424.
La Pie-griesche grise. *Brisson av.* ii. 141.
Pl. enl. 32. f. 1.
Lanius excubitor. *Lin. syst.* 135.
Warfogel. *Faun. Suec.* 80.
Danish Torn-Skade. *Norvegis* Klavert. *Br.* 21. 22.
Br. Zool. 73. plate C.

THIS bird weighs three ounces; its length is ten inches: its breadth fourteen: its bill is black, one inch long, and hooked at the end; the upper mandible furnished with a sharp process: the nostrils are oval, covered with black briftles pointing downwards: the muscles that move the bill are very thick and strong; which makes the head very large. This apparatus is quite requisite in a species whose method of killing its prey is so singular, and whose manner of devouring it not less extraordinary: small birds it will seize by the throat and strangle *; which probably is the reason the *Germans* call this bird *Wurchangel* †, or the suffocating angel. When it has killed the prey, which is birds or insects, it fixes them on some thorn, and when thus spitted pulls them to pieces with its bill: on this account the *Germans* call it *Thornträer* Descr.

* *Edw. Gl.* iii. 233. † *Wil. orn.* 87.

and

and *Thornfreker*. We have ſeen them, when confined in a cage, treat their food in much the ſame manner, ſticking it againſt the wires before they would devour it. Mr. *Edwards* very juſtly imagines that as nature has not given theſe birds ſtrength ſufficient to tear their prey to pieces with their feet, as the hawks do, they are obliged to have recourſe to this artifice.

The crown of the head, the back, and the coverts that lie immediately on the joints of the wings are aſh colored; the reſt of the coverts black: the quil feathers are black, marked in their middle with a broad white bar; and except the four firſt feathers, and the ſame number of thoſe next the body, are dipt with white: the tail conſiſts of twelve feathers of unequal lengths, the middle being the longeſt; the two middlemoſt are black, the next on each ſide tipt with white, and in the reſt the white gradually increaſes to the outmoſt, where that color has either entire poſſeſſion, or there remains only a ſpot of black: the cheeks are white, but croſſed from the bill to the hind part of the head with a broad black ſtroke: the throat, breaſt and belly are of a dirty white: the legs are black. The female is of the ſame color with the male, the breaſt and belly excepted, which are marked tranſverſely with numerous ſemicircular brown lines.

II. The

II. The RED BACKT BUTCHER BIRD.

La petite Pie griesche grise. *Belon av.* 198.
Lanius cortius. *Aldr. av.* i. 199.
Lesser Butcher Bird, called in *Yorkshire* Flusher. *Wil. orn.* 88. *sp.* 2. The *male.* 89. *sp.* 3. the *female.*
Raii syn. av. 18.
Danish Tornskade. *Norv.* Hantverk. *Br.* 23.
Mort. Northampt. 424.
L'Ecorcheur, *Brisson av.* ii. 151. *Pl. enl.* 31, f. 2.
Lanius collurio. *Lin. syst.* 136. *Faun. Suec.* 81. Tab. ii. f. 81.
Dorngreul, Dornheher. *Kram.* 363.
Bufferola, Ferlotta rossa. *Zinan.* 91.
Br. Zool. 74, plate C. 1.

THE male weighs two ounces; the female two ounces two drams. The length of the former is seven inches and a half; the breadth eleven inches. The irides are hazel; the bill resembles that of the preceding species; the head and lower part of the back are of a fine light grey: across the eyes from the bill runs a broad black stroke; the upper part of the back and coverts of the wings are of a bright ferruginous color; the breast, belly and sides are of an elegant blossom color; the two middle feathers of the tail are longest, and entirely black; the lower part of the others white, and the exterior webs of the outmost feather on each side wholly so. Descr.

In the female the stroke across the eyes is of a reddish brown; the head of a dull rust color mixed with grey; the breast, belly and sides of a dirty white marked with semicircular dusky lines; the tail is of a deep brown, the outward feather on each side excepted, whose exterior webs are white.

These

These birds build their nests in low bushes, and lay six eggs of a white color; but encircled at the bigger end with a ring of browniſh red.

III. The WOOD-CHAT.

Lanius minor primus. *Aldr. av.* i. 200.
Another ſort of Butcher Bird. *Wil. orn.* 89. *ſp.* 4.
The Wood-chat. *Raii ſyn. av.* 19. *ſp.* 6.
Br. Zool. 74. plate C. 2.
Dorngreul mit rother platten. *Kram.* 363.
La Pie grieſche rouſſe. *Briſſon av.* ii. 147.
Pl. enl. 9. f. 2.
Buferola, Ferlotta bianca. *Zinan.* 89.

THIS is one of the few *Britiſh* birds that have eſcaped our inſpection; therefore we are obliged to deſcribe it from an elegant drawing by Mr. *Edwards*, preſerved in the *Sloanian Muſeum*. In ſize it ſeems equal to the preceding: the bill is horn colored; the feathers that ſurround the baſe are whitiſh; above is a black line which is drawn croſs the eyes, and then downwards each ſide the neck: the head, and hind part of the neck are of a bright bay; the upper part of the back duſky: the coverts of the tail grey: the ſcapulars white: the coverts of the wings dusky: the quil feathers black, marked towards the bottom with a white ſpot: the throat, breaſt and belly of a yellowiſh white. The two middle feathers appear by the drawing to be entirely black: the exterior edges and tips of the reſt white: the legs black. M. *Briſſon* deſcribes the female thus: the upper part of the head, neck and body are reddiſh, ſtriated tranſverſely with brown: the lower parts of the body are of a dirty

Deſcr.

white

white rayed with brown: the tail is of a reddiſh brown, marked near the end with brown and tipt with red.

IV. The LEST BUTCHER BIRD.

Leſt Butcher Bird. *Edward av.* 55.

Bearded Titmouſe. *Ald. av.* i. *tab.* 48.

La meſange barbue, ou le moustache, Parus barbatus. *Briſſon av.* iii. 567.

Parus biarmicus. *Lin. ſyſt.* 342. *Br. Zool.* 74. plate C. 2.

THIS ſmall ſpecies is found in the marſhes near *London*: we have alſo ſeen it near *Glouceſter*. It is of the ſame ſhape as the long-tailed titmouſe; but rather larger. The bill is ſhort, ſtrong and very convex, of a yellow color: the head is of a fine grey; on each ſide the bill beneath the eye is a long triangular tuft of black feathers; the chin and throat are white: the middle of the breaſt fleſh colored; the ſides, thighs and vent feathers of a pale orange: the hind part of the neck, and the back are of an orange bay: the ſecondary feathers of the wings are black edged with orange: the quil feathers dusky on their exterior, white on their interior ſides: the leſſer quil feathers tipt with orange. The tail is two inches three quarters long: the two middle feathers of the tail are longeſt, the others gradually ſhorten on each ſide: the outmoſt of which are of a deep orange color. The legs are black. Deſcr.

The female wants the black mark on each cheek, and the fine fleſh color on the breaſt: the crown of the head is of a browniſh ruſt color ſpotted with black;

the

the outmoſt feathers of the tail are black tipt with white. Theſe bird have all the characters of the butcher-bird; ſo, after the opinion of Mr. *Edwards*, we place them in that genus.

Genus IV. CROWS.

Species I. The RAVEN.

Le Corbeau. *Belon av.* 279.
Corvus. *Geſner av.* 334.
Corvo, Corbo. *Aldr. av.* i. 343. *Wil. orn.* 181.
Raii ſyn. av. 39.
Le Corbeau. *Briſſon av.* ii. 8.
Corvus corax. *Lin. ſyſt.* 155.
Korp. *Faun. Suec.* 85.
Daniſh Raun. *Norw.* Korp. *Br.* 27.
Rab. *Kram.* 333.
Br. Zool. 75.

Deſcr. THIS ſpecies weighs three pounds; its length is two feet two inches; its breadth four feet; the bill is ſtrong and thick; and the upper mandible convex. The color of the whole bird is black, finely gloſſed with a rich blue; the belly excepted, which is duſky.

Ravens build in trees, and lay five or ſix eggs of a pale green color marked with ſmall browniſh ſpots. They frequent in numbers the neighbourhood of great towns; and are held in the ſame ſort of veneration as the vultures are in *Egypt* *, and for the ſame reaſon; for devouring the carcaſes and filth, that would otherwiſe prove a nuſance. A vulgar reſpect is alſo paid to the raven, as being the bird appointed by heaven to feed the prophet *Elijah*, when he fled from

* *Haſſelquiſt itin.* 23.

the

the rage of *Ahab* *. The raven is a very docil bird, may be taught to ſpeak, and fetch and carry. In clear weather they fly in pairs a great height, making a deep loud noiſe, different from the common croaking. Their ſcent is remarkably good; and their life prolonged to a great ſpace.

II. The CROW.

La Corneille. *Belon av.* 281.
Cornix, (Krae) *Geſner av.* 320.
Cornice, Cornacchio. *Aldr. av.* i. 369.
Wil. orn. 122.
Raii ſyn. av. 39.
La Corneille. *Briſſon av.* 12.
Corvus corone. *Lin. ſyſt.* 155.
Faun. Suec. 86.
Krage. *Br.* 30.
Br. Zool. 75.

THE crow in the form of its body agrees with the raven; alſo in its food, which is carrion and other filth. It will alſo eat grain and inſects; and like the raven will pick out the eyes of young lambs when juſt dropped: for which reaſon it was formerly diſtinguiſhed from the rook, which feeds entirely on grain and inſects, by the name of the *gor* or *gorecrow*, thus *Ben Johnſon* in his *Fox*, *act* I. *ſcene* 2.

Vulture, kite,
Raven and *gor-crow*, all my birds of prey.

England breeds more birds of this tribe than any other country in *Europe*. In the twenty-fourth of *Henry* VIII. they were grown ſo numerous and thought ſo prejudicial to the farmer, as to be conſidered an evil worthy parlementary redreſs: an act was paſ-

* 1 *Kings* 17.

fed

ſed for their deſtruction, in which rooks and choughs, were included. Every hamlet was to provide crow nets for ten years; and all the inhabitants were obliged at certain times to aſſemble during that ſpace, to conſult the propereſt method of extirpating them.

Though the crow abounds in our country, yet in *Sweden* it is ſo rare that *Linnæus* mentions it only as a bird that he once knew killed there.

It lays the ſame number of eggs as the raven, and of the ſame color: both theſe birds are often found white or pied; an accident that befals black birds more frequently than any others. The crow weighs about twenty ounces. Its length eighteen inches: its breadth two feet two inches.

III. The ROOK.

La Graye, Grolle ou Freux. *Belon av.* 283.
Cornix frugivora. (Roeck) *Geſner av.* 332. *Aldr. av.* i. 378. *Wil. orn.* 123. *Raii ſyn. av.* 39.
Corvus frugilegus. *Lin. ſyſt.* 156.
La Corneille Moiſſoneuſe. *Briſſon av.* ii. 16.
Roka. *Faun. Suec.* 87.
Spermologus, ſeu frugilega. *Cali opuſc.* 100.
Schwartze kran, Schwartze krahe. *Kram.* 333. *Br. Zool.* 76.

THIS bird differs not greatly in its form from the carrion crow: the ſize of the rook is ſuperior; but the colors in each are the ſame, the plumage of both being gloſſed with a rich purple. But what diſtinguiſhes the rook from the crow is the bill; the noſtrils, chin, and ſides of that and the mouth being in old birds white and bared of feathers, by often thruſt-

thruſting the bill into the ground in ſearch of the *erucæ* of the Dor-beetle *; the rook then, inſtead of being proſcribed, ſhould be treated as the farmer's friend; as it clears his ground from caterpillars, that do incredible damage by eating the roots of the corn. Rooks are ſociable birds, living in vaſt flocks: crows go only in pairs. They begin to build their neſts in *March*; one bringing materials, while the other watches the neſt, leſt it ſhould be plundered by its brethren: they lay the ſame number of eggs as the crow, and of the ſame color, but leſs. After the breeding ſeaſon rooks forſake their neſt-trees, and for ſome time go and rooſt elſewhere, but return to them in *Auguſt*: in October they repair their neſts †.

IV. The ROYSTON CROW.

La Corneille emmantelée. *Belon av.* 285.
Cornix varia, Marina, Hyberna, (Nabelfrae.) *Geſner av.* 332.
Cornix cinerea. *Aldr. av.* i. 379. *Wil. orn.* 124. *Raii ſyn. av.* 39. *Martin's Weſt. Iſles.* 376. Hooded Crow. *Sib. Scot.* 15. *Pl. enl.* 76.
La Corneille mantelée. *Briſſon av.* ii. 19.
Mulacchia cinerizia, Monacchia. *Zinan.* 70.
Corvus cornix. *Lin. ſyſt.* 156. Kraka. *Faun. Suec. ſp.* 88. Grave Kran, Kranveitl, *Kram.* 333. *Br. Zool.* 76. plate D. 1.

THE bill of this ſpecies agrees in ſhape with that of the rook; to which it bears great ſimilitude in its manners; flying in flocks, and feeding on inſects. In *Great-Britain* it is a bird of paſſage: viſiting us in the beginning of winter, and leaving us with the

* Scarabæus melolantha. *Lin. ſyſt.* 351. *Roſel* ii. *tab.* 1. *Liſt. Goed.* 265.
† *Calendar of Flora.*

woodcocks. They are found in the inland as well as maritime parts of our country; in the latter they feed on crabs and ſhelfiſh. They breed in *Sueden*, and build in trees, commonly in alders; and lay four eggs *. *Belon*, *Geſner* and *Aldrovand*, agree that this is a bird of paſſage in their reſpective countries: that it reſorts in the breeding ſeaſon to high mountains, and deſcends into the plains on the approach of winter. It breeds though in the ſouthern parts of *Germany*, on the banks of the *Danube* †.

Deſcr. The weight of this ſpecies is twenty-two ounces: the length twenty-two inches; the breadth twenty-three. The head, underſide of the neck, and wings are black gloſſed over with a fine blue: the breaſt belly, back, and upper part of the neck, are of a pale aſh color: the irides hazel: the legs black, and weaker than thoſe of the rook. The bottom of the toes are very broad and flat to enable them to walk without ſinking on marſhy and muddy grounds, where they are converſant. We do not know that they breed in any of the *Britiſh* iſles, except *Shetland*; being the only ſort of crow found there.

* *Faun. Suec. ſp.* 88.
† *Kram.* 333.

V. The

V. The MAGPIE.

La Pie. *Belon av.* 291.
Pica varia et caudata. *Geſner av.* 695.
Aldr. av. i. 392.
The Magpie, or Pianet. *Will. orn.* 127.
Raii ſyn. av. 41.
La Pie. *Briſſon* ii. 35.
Gazza, Putta. *Zinan.* 66.
Corvus Pica. *Lin. ſyſt.* 157.
Skata, Skiura, Skara, *Faun. Suec. ſp.* 92.
Daniſh Skade, Huus Skade. *Norw.* Skior, Tunfugl. *Brunnich* 32.
Alſter. *Kram.* 355.
Br. Zool. 77. plate D. 2.

THE great beauty of this very common bird was ſo little attended to, that the editors of the *Britiſh Zoology* thought fit to publiſh a print of it after a painting by the celebrated *Barlow*. The marks of this ſpecies are ſo well known, that it would be impertinent to detain the reader with the particulars.

We ſhall only obſerve the colors of this bird: it's black, it's white, it's green, and purple, and the rich and gilded combination of gloſſes on the tail, are at leſt equal to thoſe that adorn the plumage of any other. It bears a great reſemblance to the butcher-bird in its bill, which has a ſharp proceſs near the end of the upper mandible; in the ſhortneſs of its wings, and the form of the tail, each feather ſhortening from the two middlemoſt; it agrees alſo in its food; which are worms, inſects, and ſmall birds. It will deſtroy young chickens: it is a crafty, reſtleſs, noiſy bird: it builds its neſt with great art, covering it entirely with thorns, except one ſmall hole for admittance: and lays ſix or ſeven eggs of a pale green color ſpotted with brown. The magpie weighs near

nine ounces: the length is eighteen inches; the breadth only twenty-four.

VI. The J A Y.

Le Jay, *Belon av.* 289.
Pica glandaria. *Geſner av.* 700.
Aldr. av. i. 393.
Olina. 35.
Wil. orn. 130.
Raii ſyn. av. 41.
Ghiandaia. *Zinan.* 67.
Corvus glandarius. *Lin. ſyſt.* 156.
Le Geay, Garrulus. *Briſſon av.* ii. 47.
Allonſkrika, Kornſkrika. *Faun. Suec. ſp.* 90.
Skov-ſkade. *Br.* 33.
Nuſſ-heher. *Kram.* 335.
Br. Zool. 77. plate D.

Deſcr. THIS is one of the moſt beautiful of the *Britiſh* birds. The weight is between ſix and ſeven ounces: the length thirteen inches; the breadth twenty and a half.

The bill is ſtrong, thick and black; about an inch and a quarter long. The tongue black, thin, and cloven at the tip: the irides white. The chin is white on each ſide the bill: at the angle of the mouth are two large black ſpots. The forehead is white ſtreaked with black: the head is covered with very long feathers, which at pleaſure it can erect into the form of a creſt: the whole neck, back, breaſt and belly are of a faint purple daſhed with grey; the covert feathers of the wings are of the ſame color.

The firſt quil feather is black; the exterior webs of the nine next are aſh-colored; the interior webs duſky: the ſix next are black; but the lower ſides of their exterior webs are white tinged with blue; the two next wholly black; the laſt of a fine bay color tipt with black.

The

The greater covert feathers are moſt beautifully barred with a lovely blue, black and white: the reſt are black: the rump is white. The tail conſiſts of twelve black feathers. The feet are of a pale brown: the claws large and hooked. It lays five or ſix eggs of a dull white, mottled very obſcurely with pale brown. The young follow their parents till the ſpring; in the ſummer they are very injurious to gardens, being great devourers of peaſe and cherries: in the autumn and winter they feed on acorns, from whence the latin name. Dr. *Kramer* * obſerves, that they will kill ſmall birds. Jays are very docil, and may be brought to imitate the human voice: their native note is very loud and diſagreable.

VII. The CHATTERER.

Garrulus Bohemicus. *Geſner av.* 703.
Aldr. av. i. 395.
Bohemian Chatterer. *Wil. orn.* 133.
Silk Tail. *Raii ſyn. av.* 85.
Ray's Letters, 198. 200.
Le Jaſeur de Boheme, Bombycilla Bohemica. *Briſſon av.* ii. 333.
Phil. Tranſ. No. 175.
Ampelis garrulus. *Lin. ſyſt.* 297.
Siden Suantz, Snotuppa. *Faun. Suec. ſp.* 82.
Sieden vel Sieben Suands. *Brunnich* 25.
Zuſerl, Geidenſchweiſſl. *Kram.* 363.
Br. Zool. 77. plate C. 1.

THE critical *Fauniſt* † may poſſibly cenſure us for admitting a native of *Germany* into a *Britiſh* zoology; but as we can plead the extreme beauty

* *Kram. elench.* 335.

† *Fauniſts*, are writers on the animals of particular countries: ſuch is *Linnæus*, as author of the hiſtory of the *Swediſh* animals, to which he gave the title of *Fauna Suecica*; from one of the names

of this bird, and that it does sometimes (though very rarely) visit the northern parts of *England* in large flocks, we hope to be excused introducing it here. The subject we describe was killed on *Flamborough-moor*, *Yorkshire*.

Descr. The length was eight inches: the bill short, thick and black: the end of the upper mandible furnished with a small process: the base of the bill is covered with black feathers, which pass over each eye to the hind part of the head: the head is adorned with a long sharp pointed crest reclining backward, ash-colored mixed with red: the cheeks are tawny: the back is of the same color with the crest, but darker: the rump ash-colored: the throat is black, and in the middle is a small tuft of bristles: the breast and belly are of a pale chesnut dashed with purple: the vent feathers a bright bay: the lower part of the tail is black, the end of a rich yellow: the feathers are of an equal length, as in the jay, to which it seems to have great affinity: the lesser coverts of the wings are brown, the greater black tipt with white: the quil feathers are black; the ends of the three first white; the six next have near half an inch of their outer margin edged with a fine yellow; and that of the inner with white, so as to form an L. But what distinguishes this from all other birds are the horny appendages from the tips of seven of the lesser quil feathers, that have the color and gloss of the best red sealing wax. The legs are short and black. Writers who have had better opportunities of examining this species than we have, say that the male has

of *Cybele*, who under that character was said to favor all living creatures.

seven

seven of these appendages, the female only five *; that they live in the woods, and feed on juniper and other berries †. This bird is also found in *North America*; those figured by Mr. *Catesby*, and again by Mr. *Edwards* ‡, seem only to be varieties of our kind.

VIII. The JACK-DAW.

Chouca, Chouchette, ou Chouette. *Belon av.* 286.
Gracculus, seu monedula. *Gesner av.* 521.
Aldr. av. i. 387.
Wil. orn. 125.
Raii syn. av. 40.
Le Choucas, *Brisson av.* 24.
Mulacchia nera. *Zinan.* 70.
Corvus monedula. *Lin. syst.* 156.
Kaja. *Faun. Suec. sp.* 89.
Danish Alike. *Norw.* Kaae, Kaye, Rann Kaate, Raage. *Br.* 31.
Tagerl, Dohle, Tschockerl. *Kram.* 334.
Br. Zool. 78.

THE jack-daw weighs nine ounces: the length thirteen inches: the breadth twenty-eight. The head is large in proportion to its body; which Mr. *Willoughby* says argues him to be ingenious and crafty. The irides are white: the forehead is black: the hind part of the head ash colored; the breast and belly of the same color, but more obscure: the rest of the plumage is black, slightly glossed with blue: the feet and bill black. It is a docil loquacious bird. Descr.

Jack-daws breed in steeples, old castles, and in high rocks; laying five or six eggs: are gregarious birds; and feed on insects, grain, and seeds ‖.

* *Brunnich Ornith. Boreal.*
† *Kramer Elench. An. Austriæ.*
‡ *Cat. Carol.* i. 46. *Edw.* 242.
‖ The caryocatactes, *Wil. orn.* 132. *Edw. tab.* 240. a bird of this genus, was shot near *Mostyn, Flintshire*, in *October*, 1753; supposed to have straggled from *Germany*, where they are common,

Genus V. WOODPECKERS.

I. The GREEN WOODPECKER.

Le Pic mart, Pic verd, Pic jaulne. *Belon. av.* 299.
Geſner av. 710.
Pico verde. *Aldr. av.* i. 416.
Green Woodpecker, or Woodſpite; called alſo the Rain Fowl, High Hoe, and Hewhole. *Wil. orn.* 135.
Raii ſyn. av. 42.
Le Pic verd. *Briſſon av.* 4. 9.
Picus viridis. *Lin. ſyſt.* 176.
Wedknar, Gronſpik, Grongjoling. *Faun. Suec. ſp.* 99.
Haſſelquiſt itin. Ter. Sanct. 291.
Girald. Cambrenſ. 191.
Daniſh & Norw. Groenſpet. *Br.* 39.
Grunſpecht. *Kram.* 334.
Br. Zool. 78. plate E.

THE wiſdom of providence in the admirable contrivance of the fitneſs of the parts of animals to their reſpective nature, cannot be better illuſtrated than from this genus: which we ſhall give from the obſervations of our illuſtrious countryman Mr. *Ray* *.

Theſe birds feed entirely on inſects: and their principal action is that of climbing up and down the bodies or boughs of trees: for the firſt purpoſe

and the Roller, another bird of this claſs, was killed near *Helſtone bridge, Cornwall*, in the autumn 1766. It is alſo a native of *Germany*; and is far the moſt beautiful of the *European* birds; as an acquaintance with theſe wanderers may be agreeable to our readers, we have given its figure as well as that of the former. The one is copied from Mr. *Edwards*; the other from a drawing by *Paillou*, *Vide appendix.*

* *Ray* on the creation, p. 143.

they

they are provided with a long ſlender tongue, armed with a ſharp boney end barbed on each ſide, which by the means of a curious apparatus of muſcles* they can exert at pleaſure, darting it to a great length into the clefts of the bark, transfixing and drawing out the inſects that lurk there.

They make their neſts in the hollows of trees: in order therefore to force their way to thoſe cavities, their bills are formed ſtrong, very hard, and wedge-like at the end; Dr. *Derham* obſerves, that a neat ridge runs along the top, as if an artiſt had deſigned it for ſtrength and beauty.

Their legs are ſhort, but ſtrong; their thighs very muſcular: their toes diſpoſed, two backwards, two forward: the feathers of the tail are very ſtiff; ſharp pointed and bending downwards. The three firſt circumſtances do admirably concur to enable them to run up and down the ſides of trees with great ſecurity; and the ſtrength of the tail ſupports them firmly when they continue long in one place, either where they find plenty of food, or while they are forming an acceſs to the interior part of the timber. This form of the tail makes their flight very awkward, as it inclines their body down; and forces them to fly with ſhort and frequent jerks when they would aſcend or even keep in a line.

This ſpecies feeds oftener on the ground than any other of the genus; all of them make their neſts in the hollows of trees; and lay five or ſix eggs of a

* *Phil. trans. Martin's abridg.* III. p. 183. plate 3.

beau-

Descr. beautiful semitransparent white. This kind weighs six ounces and a half. Its length is thirteen inches; the breadth twenty and a half: the bill is dusky, triangular, and near two inches long: the crown of the head is crimson, spotted with black. The eyes are surrounded with black, beneath which (in the males only) is a rich crimson mark. The back, neck, and lesser coverts of the wings are green. The rump of a pale yellow. The greater quil feathers are dusky, spotted on each side with white. The tail consists of ten stiff feathers, whose ends are generally broken as the bird rests on them in climbing; their tips are black: the rest of each is alternately barred with dusky and deep green. The whole under part of the body is of a very pale green; and the thighs and vent marked with dusky lines. The legs and feet are of a cinereous green.

II. The GREATER SPOTTED WOODPECKER.

L'epeiche, Cul rouge, Pic rouge. *Belon av.* 300.
Picus varius, seu albus. *Gesner av.* 709.
Greater spotted Woodpecker, or Witwal. *Wil. orn.* 137. *Raii syn. av.* 43.
Picchio. *Zinan.* 73.
Le grand Pic varié. *Brisson av.* iv. 34.
Picus major. *Lin. syst.* 176.
Gyllenrenna. *Faun. Suec. sp.* 190.
Hakke-speet. *Brunnich* 40.
Grosses Baumhackl. *Kram.* 336. *Br. Zool.* 79. plate E.

Descr. THIS species weighs two ounces three quarters; the length is nine inches: the breadth is sixteen. The bill is one inch and a quarter long of a black horn color. The irides are red. The forehead is of a pale buff color. The crown of the head a glossy black.

The hind part marked with a rich deep crimſon ſpot: the cheeks white; bounded beneath by a black line that paſſes from the corner of the mouth and ſurrounds the hind part of the head. The neck is encircled with a black color. The throat and breaſt are of a yellowiſh white. The vent feathers of a fine light crimſon. The back rump and coverts of the tail, and leſſer coverts of the wings are black; the ſcapular feathers and coverts adjoining to them are white. The quil feathers black, elegantly marked on each web with round white ſpots. The four middle feathers of the tail are black, the next tipt with dirty yellow; the bottoms of the two outmoſt black: the upper parts a dirty white. The exterior feather marked on each web with two black ſpots; the next with two on the inner web, and only one on the other. The legs are of a lead color. The female wants that beautiful crimſon ſpot on the head, in other reſpects the colors of both agree. This ſpecies is much more uncommon than the preceding; and keeps altogether in the woods.

III. The

III. The LESS SPOTTED WOODPECKER.

Geſner av. 709.
Aldr. av. i. 416.
Leſſer ſpotted Woodpecker, or Hickwall. *Wil. orn.* 138.
Raii ſyn. av. 43.
Picus minor. *Lin. ſyſt.* 176.
Le petit Pic varié. *Briſſon. av.* iv. 41.
Faun. Suec. ſp. 102.
Haſſelquiſt itin. 242.
Kleiner Baumhackl. *Kram.* 336.
Br. Zool. 79. plate E.

Deſcr. THIS ſpecies is the leſt of the genus, ſcarce weighing an ounce: the length is ſix inches; the breadth eleven. The forehead is of a dirty white: the crown of the head (in the male) of a beautiful crimſon: the cheeks and ſides of the neck are white, bounded by a bed of black beneath the former. The hind part of the head and neck, and the coverts of the wings are black: the back is barred with black and white: the ſcapulars and quil feathers ſpotted with black and white: the four middle feathers of the tail are black; the others varied with black and white: the breaſt and belly are of a dirty white: the vent feathers a bright crimſon: the crown of the head (in the female) is white; it wants alſo the red mark under the tail: the feet are of a lead color. It has all the characters and actions of the greater kind, but is not ſo often met with. Beſides theſe, we are credibly informed that the *Pic varié* of *M. Briſſon*, and the *Picus medius* of *Linnæus* is found in *Lancaſhire*.

Genus

Genus VI. The WRYNECK.

I. The WRYNECK.

Le Tercou, Torcou, ou Turcot. *Belon av.* 306.
Jynx. *Geſner av.* 573.
Aldr. av. i. 421.
The Wryneck. *Wil. orn.* 138.
Raii ſyn. av. 44.
Le Torcol, Torquilla. *Briſſon av.* IV. 4. *tab.* I. *fig.* 1.
Collotorto, verticella. *Zinan.* 72.
The Emmet Hunter. *Charlton ex.* 93.
Jynx torquilla. *Lin. ſyſt.* 172.
Gjoktyta. *Faun. Suec. ſp.* 97.
Bende-Hals. *Br.* 37.
Natterwindt, Wendhals. *Kram.* 336.
Br. Zool. 80. plate F.

NATURE, by the elegance of its pencilling the colors of this bird, hath made ample amends for their want of ſplendor. Its plumage is marked with the plaineſt kinds. A liſt of black and ferruginous ſtrokes divides the top of the head and back. The ſides of the head and neck are aſh colored beautifully traverſed with fine lines of black and reddiſh brown. The quil feathers are duſky, but each web is marked with ruſt colored ſpots. The chin and breaſt are of a light yellowiſh brown, adorned with ſharp pointed bars of black. The tail conſiſts of ten feathers, broad at their ends and weak; of a pale aſh color, powdered with black and red, and marked with four equidiſtant bars of black. The tongue is long and cylindric: for the ſame uſe as that of the woodpecker. The toes are alſo diſpoſed the ſame way. The bill is ſhort, weak and a little arcuate. The irides are of a yellowiſh hazel. Deſcr.

The Wryneck we believe to be a bird of paſſage; appear-

appearing here in the ſpring before the cuckoo. The *Welſh* conſider it as the forerunner or ſervant of that bird, and call it *Gwâs y gog*, or the cuckoo's attendant: the *Swedes* regard it in the ſame light *. The food of theſe birds is the ſame with that of the woodpecker. Its weight is one ounce and a quarter: the length ſeven inches; the breadth eleven. It takes its name from a manner it has of turning its head back to the ſhoulders; eſpecially when terrified: it has alſo the faculty of erecting the feathers of the head like thoſe of the jay. Its eggs are white, and have ſo thin a ſhell that the yolk may be ſeen through it. This bird builds in the hollows of trees, making its neſt of dry graſs, in which we have counted nine young.

Genus VII. The CUCKOO.

I. The CUCKOO.

Le Coqu. *Belon av.* 132.
Cuculus. *Geſner av.* 362.
Aldr. av. i. 210.
Cuculo. *Olina* 38.
Wil. orn. 97.
Raii ſyn. av. 23.
Le Coucou. *Briſſon av.* 105.
Cuculus canorus. *Lin. ſyſt.* 168.
Gjok. *Faun. Suec. ſp.* 96.
Daniſh Gjoeg v. Kuk. *Norv.* Gouk. *Br.* 36.
Kuckuck. *Kram.* 337.
Br. Zool. 80. plate G. G. 1.

THIS ſingular bird appears in our country early in the ſpring, and makes the ſhorteſt ſtay with us of any bird of paſſage; it is compelled here, as

* Jynx hieme non apparet, vere autem remigrans, cuculi, poſt quatuordecem dies, adventum ruricolis annuntiat. *Amæn. acad.* iv. 584.

Mr.

Mr. *Stillingfleet* obſerves, by that conſtitution of the air which cauſes the fig-tree to put forth its fruit *: From the coincidence of the firſt appearance of the ſummer birds of paſſage, and the leafing and fruiting of certain plants; this ingenious writer would eſtabliſh a natural calendar in our rural œconomy; to inſtruct us in the time of ſowing our moſt uſeful ſeeds, or of doing ſuch work as depends on a certain temperament of the air. As the fallibility of human calendars need not be inſiſted on, we muſt recommend to our countrymen ſome attention to theſe feathered guides, who come heaven-taught, and point out the true commencement of the ſeaſon †; their food being the inſects of thoſe ſeaſons they continue with us.

The cuckoo is ſilent for ſome little time after his arrival: his note is a call to love, and uſed only by the male, who ſits perched generally on ſome dead tree, or bare bough, and repeats his ſong, which he looſes as ſoon as the amorous ſeaſon is over. In a trap, which we placed on a tree frequented by cuckoos, we caught not fewer than five male birds in one ſeaſon; his note is ſo uniform, that his name in all languages ſeems to have been derived from it; and in all other countries it is uſed in the ſame reproachful ſenſe.

the plain ſong *cuckoo* grey,
whoſe note full many a man doth mark,
and dares not anſwer nay. *Shakeſpear.*

* *Calendar of Flora. vid. Preface throughout.*

† In *Sweden*, which is a much colder climate than our own, the cuckoo does not appear ſo early by near a month.

The

The reproach ſeems to ariſe from this bird making uſe of the bed or neſt of another to depoſit its eggs in; leaving the care of its young to a wrong parent. A water-wagtail or hedge ſparrow, is generally the nurſe of the young cuckoos; who, if they happen to be hatched at the ſame time with the genuine off-ſpring, quickly deſtroy them, by overlaying them as their growth is ſoon ſo ſuperior. This want in the cuckoo of the common attention other birds have to their young; ſeems to ariſe from ſome defect in its make, that diſables it from incubation; but what that is, we confeſs ourſelves ignorant, referring the inquiry to ſome ſkilful anatomiſt.

Deſcr. The weight of the cuckoo is a little more than five ounces; the length is fourteen inches; the breadth twenty-five. The bill is black, very ſtrong, a little incurvated, and about two-thirds of an inch long. The irides are yellow. The head, hind part of the neck, the coverts of the wings, and the rump are of a dove color; darker on the head and paler on the rump. The throat and upper part of the neck are of a pale grey: the breaſt and belly white, croſſed elegantly with undulated lines of black. The vent feathers of a buff color, marked with a few duſky ſpots. The wings are very long, reaching within an inch and a half of the end of the tail; the firſt quil feather is three inches ſhorter than the others; they are duſky, and their inner webs are barred with large oval white ſpots. The tail conſiſts of ten feathers of unequal lengths like thoſe of the butcher bird: the two middle are black tipt with white; the others are marked with white ſpots on each ſide their ſhafts. The legs

are

are ſhort; and the toes diſpoſed two backwards and two forwards like the woodpecker, though it is never obſerved to run up the ſides of trees. The female differs in ſome reſpects. The neck before and behind is of a browniſh red: the tail barred with the ſame color and black, and ſpotted on each ſide the ſhaft with white. The young birds are brown mixed with ferruginous and black, and in that ſtate have been deſcribed by ſome authors as old ones.

Genus VIII. The NUTHATCH.

I. The NUTHATCH.

Le grand Grimpereau, le Torchepot. *Belon av.* 304
Picus cinereus, ſeu Sitta. *Geſner av.* 711.
Ziolo. *Aldr. av.* i. 417.
The Nuthatch, or Nut-jobber. *Wil. orn.* 142.
Raii ſyn. av. 47.
The Woodcracker. *Plott's hiſt. Oxf.* 175.
Sitta Europæa. *Lin. ſyſt.* 177.
Le Torchepot, Sitta. *Briſſon av.* iii. 588. *tab.* 29. *fig.* 3.
Picchio grigio, Raparino. *Zinan.* 74.
Notwacka, Notpacka. *Faun. Suec. ſp.* 104.
Daniſh Spœtt-meiſe. *Norw.* Nat-Bake. *Br.* 42.
Klener, Nuſſzhacker. *Kram.* 362.
Br. Zool. 81. plate H.

Deſcr. THE nuthatch weighs near an ounce; its length is five inches three-quarters; breadth nine inches; the bill is ſtrong and ſtrait, about three quarters of an inch long; the upper mandible black, the lower white: the irides hazel; the crown of the head, back, and coverts of the wings are of a fine bluiſh grey: a black ſtroke paſſes over the eye from the mouth: the cheeks and chin are white: the breaſt

and belly of a dull orange color; the quil-feathers dusky; the wings underneath are marked with two ſpots, one white at the root of the exterior quills; the other black at the joint of the baſtard wing; the tail conſiſts of twelve feathers; the two middle are grey; the two exterior feathers tipt with grey, then ſucceeds a tranſverſe white ſpot; beneath that the reſt is black; the legs are of a pale yellow; the back toe very ſtrong, and the claws large.

This bird runs up and down the bodies of trees, like the woodpecker tribe; and feeds not only on inſects, but nut kernels; it is a pretty ſight, ſays Mr. *Willoughby*, to ſee her fetch a nut out of her hoard, place it faſt in a chink, and then ſtanding above it with its head downwards, ſtriking it with all its force, breaks the ſhell, and catches up the kernel: it breeds in the hollows of trees; if the entrance to its neſt be too large, it ſtops up part of it with clay, leaving only room enough for admiſſion: in autumn it begins to make a chattering noiſe, being ſilent for the greateſt part of the year. *Doctor Plott* tells us, that this bird, by putting its bill into a crack in the bough of a tree, can make ſuch a violent ſound as if it was rending aſunder, ſo that the noiſe may be heard at leſt twelve ſcore yards.

Genus

Genus IX. The KINGFISHER.

I. The KINGFISHER.

Le Martinet peſcheur. *Belon av.* 218.
Iſpida (Isfogel) *Geſner av.* 571. *Aldr. av.* iii. 200. *Olina* 39. 40. *Will. orn.* 146. *Raii ſyn. av.* 48. *Pl. enl.* 77.
Alcedo iſpida. *Lin. ſyſt.* 179.
Le Martin-pêcheur. *Briſſon av.* iv. 471.
Piombino, Martino peſcatore, Peſcatore del re. *Zinan.* 116.
Isfogel. *Muſ. Fr. ad.* 16.
Jis-fugl. *Brunnich in Append.*
Meerſchwalbe. *Kram.* 337.
Br. Zool. 82. plate I.

THIS bird weighs an ounce and a quarter: its length is ſeven inches; its breadth eleven: its ſhape is very clumſy, the head and bill being very large, and the legs diſproportionably ſmall: the bill is two inches long; the upper mandible black, the lower yellow: the irides are red: the colors of this bird atone for its inelegant form: the crown of the head, and the coverts of the wings are of a deep blackiſh green, ſpotted with bright azure: the ſcapular feathers, and coverts of the tail are alſo of a moſt reſplendent azure: the whole underſide of the body is orange colored; a broad mark of the ſame paſſes from the bill beyond the eyes; beyond that is a large white ſpot: the tail is ſhort, and conſiſts of twelve feathers of a rich deep blue: the feet are of a reddiſh yellow: the three lower joints of the outmoſt toe adhere to the middle toe: the inner toe adheres to it by one joint. Deſcr.

The kingfiſher frequents the banks of rivers, and

feeds on fish. To compare small things to great, it takes its prey after the manner of the *osprey*, balancing itself at a certain distance over the water for a considerable space, then darting below the surface, brings the prey up in its feet. While it remains suspended in the air, in a bright day, the plumage exhibits a most beautiful variety of the most dazzling and brilliant colors. This striking attitude did not escape the notice of the antients, for *Ibycus*, as quoted by *Athenæus*, styles these birds ἀλκυονες ταυσιπτεροι *, the *halcyons* with expanded wings. It makes its nest in holes in the sides of the cliffs, which it scoops to the depth of three feet; and lays from five to nine eggs †, of a most beautiful semi-transparent white. The nest is very fetid, by reason of the remains of the fish brought to feed the young.

This species is the ἀλκυων αφων, or mute *halcyon* of *Aristotle* ‡, which he describes with more precision than is usual with that great philosopher: after his description of the bird, follows that of its nest, than which the most inventive of the antients have delivered nothing that appears more fabulous and extravagant. He relates, that it resembled those concretions that are formed by the sea-water; that it resembled the long necked gourd, that it was hollow within, that the entrance was very narrow, so that should it overset the water could not enter; that it resisted any violence from iron, but could be broke with a blow of the

* P. 388.

† *Gesner* says he found nine young in one nest.

‡ *Hist. an.* 892. 1050.

hand;

hands, and that it was compoſed of the bones of the Βελόνη or ſea needle *.

Yet much of this ſeems to be founded on truth. The form of the neſt agrees moſt exactly with the curious account of it that count *Zinanni* has favored us with †. The materials which *Ariſtotle* ſays it was compoſed of, are not entirely of his own invention. Whoever has ſeen the neſt of the kingfiſher, will obſerve it ſtrewed with the bones and ſcales of fiſh; the fragments of the food of the owner and its young: and thoſe who deny that it is a bird that frequents the ſea, muſt not confine their ideas to our northern ſhores; but reflect, that birds that inhabit a ſheltered place in the more rigorous latitudes, may endure expoſed ones in a milder clime. *Ariſtotle* made his obſervations in the eaſt: and allows, that the *halcyon* ſometimes aſcended rivers ‡; poſſibly to breed: for we learn from *Zinanni*, that in his ſoft climate, *Italy*, it breeds in *May*, in banks of ſtreams that are near the ſea; and having brought up the firſt hatch, returns to the ſame place to lay a ſecond time.

On this foundation, the ſucceeding writers formed ſeveral other tales equally abſurd; and the poets, indulging the powers of imagination, dreſſed the ſtory

* 1050. See alſo *Ælian.* lib. ix. c. 17. *Plin.* lib. x. c. 32.

† Nidifica egli nelle ripe degli acquidotti, o de piccoli torrenti vicino al mare, formando però il nido nei ſiti più alti di dette ripe, acciocchè l'eſcreſcenza delle acque non poſſa inſinuarſi nel di lui foro; e fa egli detto nido incavando internamente il terreno in tondo per la lunghezza di tre piedi, e riducendo il fine di detto foro a foggia di battello, tutto coperto di ſcaglie di peſci, che reſtano vagamente intrecciate; ma forſe non ſono così diſpoſte ad arte, bensì per accidente.

‡ Ἀναβαίνει δέ τε ἐπὶ τὰς ποταμὰς. Hiſt. an. 1050.

in all the robes of romance. This neſt was a floating one;

Incubat *halcyone* pendentibus æquore nidis *.

It was therefore neceſſary to place it in a tranquil ſea, and to ſupply the bird with charms to allay the fury of a turbulent element during the time of its incubation; for it had, at that ſeaſon, power over the ſeas and the winds.

Χ' ἀλκυόνες ϛορεσεῦντι τὰ κύματα, την τε θάλασσαν,
Τόν τε νότον, τον τ' εὖρον, ὸς ἴσχατα φυκία κινεῖ·
Ἀλκυόνες, γλαυκαῖς Νηρήϊσι ταί τε μάλιϛα
Ορνίθων ἐφίλαθεν. *Theocrit. Idyl.* vii. l. 57 †.

Theſe birds were equally favorites with *Thetis* as with the *Nereids*;

Dilectæ *Thetidi* Halcyones. *Virg. Georg.* I. 399.

As if to their influence theſe deities owed a repoſe in the midſt of the ſtorms of winter, and by their means were ſecured from thoſe winds that diſturbed their ſubmarine retreats, and agitated even the plants at the bottom of the ocean.

Such are the accounts given by the *Roman* and *Sicilian* poets. *Ariſtotle* and *Pliny* tell us, that this bird is moſt common in the ſeas of *Sicily*: that it ſat only a few days, and thoſe in the depth of winter; and during that period the mariner might ſail in full ſecurity; for which reaſon they were ſtyled, *Halcyon days* ‡.

* *Ovid. Met.* lib. xi.

† May *Halcyons* ſmooth the waves, and calm the ſeas,
And the rough ſouth-eaſt ſink into a breeze;
Halcyons of all the birds that haunt the main,
Moſt lov'd and honor'd by the *Nereid* train. *Fawkes.*

‡ *Ariſt. hiſt. an.* 541. *Plin.* lib. x. c. 32. lib. xviii. c. 24. Αλκυονειαι ημεραι of the former; and *dies halcyonides* of the latter.

Peique

Perque dies placidos hiberno tempore ſeptem
Incubat *halcyone* pendentibus æquore nidis:
Tum via tuta maris: ventos cuſtodit, et arcet
Æolus egreſſu *. *Ovid. Met.* lib. xi.

In after times, theſe words expreſſed any ſeaſon of proſperity: theſe were the *Halcyon days* of the poets; the brief tranquillity; the *ſeptem placidi dies* of human life.

The poets alſo made it a bird of ſong: *Virgil* ſeems to place it in the ſame rank with the *goldfinch*;

Littoraque *halcyonem* reſonant, & *acanthida* dumi.
Georg. III. 338.

And *Silius Italicus* celebrates its muſic, and its floating neſt:

Cum ſonat *halcyone* cantu, nidoſque natantes
Immotâ geſtat ſopitis fluctibus undâ. *Lib.* XIV. 275.

But we ſuſpect that theſe writers have transferred to our ſpecies, the harmony that belongs to the *vocal alcedo* of the philoſopher, καὶ ἡ μὲν φθέγγεται, καθιζάνουσα ἐπὶ τῶν δονάκων †, *which was vocal and perched upon reeds.* *Ariſtotle* ſays, it is the leſt of the two, but that both of them have a cyanean back ‡. *Belon* labors to prove the *vocal alcedo* to be the *rouſſerolle*, or the *greater reed ſparrow* ‖, a bird found in *France* and ſome other parts of *Europe*, and of a very fine note: it is true that it is converſant among reeds, like the

* *Alcyone* compreſs'd,
Seven days ſits brooding on her watery neſt
A wintry queen; her ſire at length is kind,
Calms every ſtorm and huſhes every wind. *Dryden.*

† *Hiſt. an.* 892.

‡ Νῶτον κυανοῦν, the color of the *cyanus*, or *lapis lazuli*.

‖ Le Rouſſerolle, *Belon av.* 221. Le Roucherolle, *Briſſon av.* ii. 218. Greater reed ſparrow, *Wil. orn.* 143. Turdus arundinaceus, *Lin. ſyſt. ſp.* 296.

bird described by *Ariſtotle*; but as its colors are very plain, and that ſtriking character of the fine blue back is wanting, we cannot aſſent to the opinion of *Belon*; but rather imagine it to be one of the loſt birds of the antients.

Thoſe who think we have ſaid too much on this ſubject, ſhould conſider how incumbent it is on every lover of ſcience, to attempt placing the labors of the antients in a juſt light; to clear their works from thoſe errors, that owe their origin to the darkneſs of the times; and to evince, that many of their accounts are ſtrictly true; many founded on truth; and others contain a mixture of fable and reality, which certainly merit the trouble of ſeparation. It is much to be lamented that travellers, either on claſſic or any other ground, have not been more aſſiduous in noting the zoology of thoſe countries, which the antients have celebrated for their productions: for, from thoſe who have attended to that branch of natural knowlege, we have been able to develope the meaning of the old naturaliſts; and ſettle with preciſion ſome few of the animals of the antients.

Italy, a country crowded with travellers of all nations, hath not furniſhed a ſingle writer on claſſical zoology. The *Eaſt* has been more fortunate: *Belon*, the firſt voyager who made remarks in natural hiſtory during his travels, mentions many of the animals of the places he viſited, and may be very uſeful to aſcertain thoſe of *Ariſtotle*, eſpecially as he has given their modern *Greek* names. Our countryman, Dr. *Ruſſel*, enumerates thoſe of *Syria*. Dr. *Haſſelquiſt* has made ſome additions to the ornithology of *Egypt*: but

but all these fall short of the merits of that most learned and inquisitive traveller, Dr. *Shaw*; who with unparalled learning and ingenuity, has left behind him the most satisfactory, and the most beautiful comments on the animals of the antients, particularly those mentioned in HOLY WRIT or what relates to the *Egyptian* mythology: such as do honor to our country, and we flatter ourselves will prove incentives to other travellers, to complete what must prove unequal to any one genius, be it ever so great: from such we may be supplied with the means of illustrating the works of the antient naturalists; whilst commentators, after loading whole pages with unenlightening learning, leave us as much in the dark, as the age their authors wrote in.

Genus X. The CREEPER.

I. The CREEPER.

Le petit Grimpereau. *Belon av.* 375.
Certhia. *Gesner av.* 251. *Aldr. av.* i. 424. *Wil. orn.* 144. *Raii syn. av.* 47.
The Oxeye Creper. *Charlton ex.* 93.
Picchio piccolo. *Zinan.* 75.
Le Grimpereau. *Brisson* iii. 603. *Cat. Carol.* app. 37.
Certhia familiaris. *Lin. syst.* 184.
Krypare. *Faun. Suec. sp.* 106.
Træe-Pikke v. Lie-Hesten. *Br.* p. 12.
Baumlaufferl. *Kram.* 337. *Br. Zool.* 82. plate K.

THE creeper weighs only five drams: and next to the crested wren is the lest of the *British* birds: the manner it has of ruffling its feathers, and their length

length give it a much larger appearance than is real.

Descr. The length of this bird is five inches and a half: the breadth ſeven and a half: the bill is hooked like a ſickle: the irides hazel: the legs ſlender: the toes and claws very long, to enable it to creep up and down the bodies of trees in ſearch of inſects, which are its food: it breeds in hollow trees; and lays ſometimes twenty eggs: the head and upper part of the neck are brown, ſtreaked with black; the rump is tawny: the coverts of the wings are variegated with brown and black: the quil-feathers duſky, tipt with white, and edged and barred with tawny marks: the breaſt and belly are of a ſilvery white: the tail is very long, and conſiſts of twelve ſtiff feathers; notwithſtanding Mr. *Willoughby*, and other ornithologiſts give it but ten: they are of a tawny hue, and the interior ends of each ſlope off to a point.

Genus

Genus XI. The HOOPOE.

I. The HOOPOE.

La Huppe. *Belon av.* 293.
Upupa. *Geſner av.* 776.
Aldr. av. ii. 314.
Bubbola. *Olina* 36.
The Hoop, or Hoopoe. *Will. orn.* 145.
Raii ſyn. av. 48.
The Dung Bird. *Charlton ex.* 98. *tab.* 99.
Plott's Oxf. 177.
Edw. 345.
Pl. enl. 52.
La Hupe ou Puput. *Briſſon av.* ii. 455. *tab.* 43.
Upupa epops. *Lin. ſyſt.* 183.
Harfogel, Pop. *Faun. Suec. ſp.* 105.
Her-fugl, *Brunnich* 43.
Widhopf. *Kram.* 337.
Upupa; arquata ſtercoraria; gallus lutoſus. *Klein Stem. av.* 24. *tab.* 25.
Br. Zool. 83. plate L.

THIS bird may be readily diſtinguiſhed from all others that viſit theſe iſlands by its beautiful creſt, which it can erect or depreſs at pleaſure: it weighs three ounces: its length is twelve inches: its breadth nineteen: the bill is black, two inches and a half long, ſlender, and incurvated: the tongue triangular, ſmall, and placed low in the mouth: the irides are hazel: the creſt conſiſts of a double row of feathers; the higheſt about two inches long: the tips are black, their lower part of a pale orange color: the neck is of a pale reddiſh brown: the breaſt and belly white; but in young birds marked with narrow duſky lines pointing down: the leſſer coverts of the wings are of a light brown: the back, ſcapulars and wings croſſed with broad bars of white and black: the rump is white: the tail conſiſts of only ten feathers, white marked with black, in form of a creſcent, Deſcr.

creſcent, the horns pointing towards the end of the feathers. The legs are ſhort and black: the exterior toe is cloſely united at the bottom to the middle toe.

According to *Linnæus* it takes its name from its note *, which has a ſound ſimilar to the word; or it may be derived from the *French huppè*, or creſted: it breeds in hollow trees, and lays two aſh-colored eggs: it feeds on inſects; the antients believed that it made its neſt of human excrement: the country people in *Sweden* look on the appearance of this bird as a preſage of war;

——————— Facies armata videtur †.

And formerly the vulgar in our country eſteemed it a forerunner of ſome calamity: it viſits theſe iſlands frequently; but not at ſtated ſeaſons, neither does it breed with us.

* *Faun. Suec.* 2d *edit.* 37.

† *Ovid* ſays, *Tereus* was changed into this bird:

Vertitur in volucrem, cui ſtant in vertice criſtæ,
Prominet immodicum pro longa cuſpide roſtrum:
Nomen *Epops* volucri. *Metam.* lib. vi. l. 672.

Genus

Genus XII. The CHOUGH.

I. The CORNISH CHOUGH.

Scurapola. *Belon obſ.* 12.
La Chouette ou Chouca rouge, *Belon av.* 286.
Pyrrhocorax graculus ſaxatilis. (Stein-tahen, Stein-frae) *Geſner av.* 522, 527.
Spelvier, Taccola. *Aldr. av.* i. 386.
Wil. orn. 126.
Rait ſyn. av. 40.
The Killegrew. *Charlton ex.* 75.
Cornwall Kae. *Sib. Scot.* 15.
Borlaſe Cornw. 249. *tab.* 24.
Camden vol. i. 14.
Le Coracias. *Briſſon av.* ii. 41. *tab.* 1.
Corvus graculus. *Lin. ſyſt.* 158.
Monedula pyrrhocorax. *Haſſelquiſt itin.* 238.
Br. Zool. 83. plate L *.

THIS ſpecies is but thinly ſcattered over the northern world: no mention is made of it by any of the *Fauniſts*; nor do we find it in other parts of *Europe*, except *England*, and the *Alps* *. In *Aſia*, the iſland of *Candia* produces it †. In *Africa*, *Ægypt*: which laſt place it viſits towards the end of the inundations of the *Nile* ‡. Except *Ægypt* it affects mountanous and rocky ſituations; and builds its neſt in high cliffs, or ruined towers, and lays four or five eggs white ſpotted with a dirty yellow. It feeds on inſects, and alſo on new ſown corn: they commonly fly high, make a ſhriller noiſe than the jackdaw, and may be taught to ſpeak. It is a very tender bird, and unable to bear very ſevere weather; is of an ele-

* *Plin. nat. hiſt. lib.* 10. *c.* 48. *Briſſon* ii. 5.
† *Belon obſ.* 17.
‡ *Haſſelquiſt itin.* 240.

gant

gant, ſlender make, active, reſtleſs, and thieving; much taken with glitter, and ſo meddling as not to be truſted where things of conſequence lie. It is very apt to catch up bits of lighted ſticks; ſo that there are inſtances of houſes being ſet on fire by its means; which is the reaſon that *Camden* calls it *incendiaria avis*. Several of the *Welſh* and *Corniſh* families bear this bird in their coat of arms. It is found in *Cornwall*, *Flintſhire*, *Caernarvonſhire*, and *Angleſea*, in the cliffs and caſtles along the ſhores.

Deſcr. Its weight is thirteen ounces; the breadth thirty-three inches: the length ſixteen: its color is wholly black, beautifully gloſſed over with blue and purple: the legs and bill are of a bright orange, inclining to red, the tongue almoſt as long as the bill, and a little cloven: the claws large, hooked, and black.

Genus

Genus XIII. The GROUS.

* With legs feathered to the feet: broad ſcarlet eye-brows.

** With naked legs.

I. The COCK OF THE WOOD.

The HEN OF THE WOOD.

Le Coc de bois ou Faiſan bruyant. *Belon av.* 249.
Urogallus major (the Male.) *Geſner av.* 490.
Grygallus major (the Female.) 495.
Gallo cedrone, Urogallus ſive Tetrao. *Aldr. av.* ii. 29.
Gallo alpeſtre, Tetrax *Nemeſiani* (fem.) *Ald. av.* ii. 33.
Pavo ſylveſtris. *Girald. Topogr. Hibern.* 706.
Cock of the Mountain, or Wood. *Wil. orn.* 172.
Raii ſyn. av. 53.
Pl. enl. 73. 74.
Capricalca. *Sib. Scot.* 16. *tab.* 14, 18.
Le cocque de Bruyeres. *Briſſon av.* i. 182.
Tetrao urogallus. *Lin. ſyſt.* 273. Kjader. *Faun. Suec. ſp.* 200. *Pontop.* ii. 101.
Tjader-hona, *Haſſelquiſt itin.* †571.
Klein Stem. tab. 27.
Mas *Norvegis* Tiur, Teer, Toedder. Foemina *Norv.* Roey. *Brunnich* 194.
Aurhan *Kram.* 356.
Br. Zool. 84. plates M. M*.

THIS ſpecies is found in no other part of *Great Britain* than the northern highlands of *Scotland*; and even there not frequently. We believe that the breed is extinct in *Ireland*, where it was formerly

† *Swediſh* edition. This bird was ſhot in the iſle of *Milo*, on a *palm tree*. *Belon* tells us, it is often found in *Crete*, *Obſ.* p. 11. The *Engliſh* tranſlator of *Haſſelquiſt* gives a falſe name to the bird, calling it the *Black Game*.

merly found; it inhabits wooded and mountanous countries; in particular, foreſts of pines, birch-trees, and junipers; feeding on the tops of the former, and berries of the latter; which often infects the fleſh with ſuch a taſte, as to render it ſcarce eatable. It lays from ſix to eight eggs.

Deſcr. The length of the male is two feet eight inches; the breadth three feet ten; its weight ſometimes fourteen pounds. The female is much leſs, the length being only twenty-ſix inches; the breadth forty. The ſexes differ alſo greatly in colors. The bill of the male is of a pale yellow: the noſtrils are covered with duſky feathers: the head, neck and back are elegantly marked, ſlender lines of grey and black running tranſverſely. The feathers on the hind part of the head are long, and beneath the throat is a large tuft of long feathers. The upper part of the breaſt is of a rich gloſſy green, the reſt of the breaſt and the belly black, mixed with ſome white feathers: the ſides are marked like the neck: the coverts of the wings croſſed with undulated lines of black and reddiſh brown: the exterior webs of the greater quil feathers are black: at the ſetting on of the wings is a white ſpot; the inner coverts are of the ſame color: the tail conſiſts of eighteen feathers, the middle of which is the longeſt; they are black, marked on each ſide with a few white ſpots: the vent feathers black mixed white. The legs very ſtrong, covered with brown feathers: the edges of the toes pectinated.

The female differs greatly from the male: the bill is duſky: the throat red: the head, neck and back are marked with tranſverſe bars of red and black;

the

the breaſt has ſome white ſpots on it, and the lower part is of a plain orange color: the tail is of a deep ruſt color barred with black.

II. The BLACK COCK.

Urogallus minor (the male.) *Geſner av.* 493. Grygallus minor (the female.) 496.

Faſan negro, Faſiano alpeſtre, Urogallus ſive Tetrao minor Gallus Scoticus ſylveſtris. *Aldr. av.* ii. 32. 160.

Raii ſyn. av. 53.

Heath-cock, black Game, or Grous. *Wil. orn.* 173.

Tetrao tetrix. *Lin. ſyſt.* 274.

Orre, *Faun. Suec. ſp.* 102.

Le Coq-de-bruyeres a queue fourchue. *Briſſon av.* i. 186.

Cimbris mas Urhane, *fœmina* Urhoene. *Norvegis* Orrfugl. *Brunnich* 196.

Berkhan, Schildhan. *Kram.* 356.

Br. Zool. 85. *tab.* M. 1. 2.

THESE birds, like the former, are fond of wooded and mountanous ſituations; they feed on bilberries, and other mountain fruits; and in the winter on the tops of the heath. They are often found in woods; this and the preceding ſpecies perching like the pheaſant: in the ſummer they frequently deſcend from the hills to feed on corn: they never pair; but in the ſpring the male gets upon ſome eminence, crows and claps his wings *; on which ſignal all the females within hearing reſort to him: the hen lays ſeldom more than ſix or ſeven eggs. The young males quit their mother in the beginning of winter; and keep in flocks of ſeven or eight till ſpring; during

* The ruffed heathcock of *America*, a bird of this genus, does the ſame. *Edw. Gl.* p. 80. The cock of the wood agrees too in this exultation during the amorous ſeaſon; at which time the peaſants in the *Alps*, directed by the ſound, have an opportunity of killing them.

that time they inhabit the woods: they are very quarrelsome, and will fight together like game cocks; and at that time are so inattentive to their own safety, that it has often happened that two or three have been killed at one shot.

Descr. An old black cock will weigh near four pounds; its length is one foot ten inches; its breadth two feet nine: the bill is dusky: the plumage of the whole body black, glossed over the neck and rump with a shining blue. The coverts of the wings are of a dusky brown: the four first quil feathers are black; the next white at the bottom; the lower half of the secondary feathers white, and the tips are of the same color: the inner coverts of the wings white: the thighs and legs are covered with dark brown feathers; on the former are some white spots: the toes resemble those of the former species. The tail consists of sixteen black feathers, and is much forked; the exterior feathers bend greatly outwards, and their ends seem as if cut off. The feathers under the tail and inner coverts of the wings are of a pure white.

The female weighs only two pounds; its length is one foot six inches; its breadth two feet six. The head, neck and breast are marked with alternate bars of dull red and black. The back, coverts of the wings and tail are of the same colors, but the red is deeper: the inner webs of the quil feathers are mottled with black and white: the inner coverts of the wings are white; and in both sexes form a white spot on the shoulder. The tail is slightly forked; it consists of eighteen feathers variegated with red and black. The feathers under the tail are white, marked

with

with a few bars of black and orange. This bird hatches its young late in the ſummer. It lays from ſix to eight eggs, of a dull yellowiſh white color, marked with numbers of very ſmall ferruginous ſpecks; and towards the ſmaller end with ſome blotches of the ſame hue.

Beſides the common ſpecies of black cock, M. *Briſſon* mentions a variety found in *Scotland*, under the name of *le coq de bruyere piqueté*, or ſpotted black cock. It differs from the common ſort in being ſpotted on the neck, breaſt, wings and thighs with red. The female is grey ſpotted with black; and both ſexes are marked on their lower ſides with white. This kind has not fallen within our notice; but M. *Briſſon*'s account has been confirmed to us by a gentleman who a few years ago viſited the *Highlands* of *North Britain*: it is alſo found in *Sweden*, and deſcribed by *Linnæus* in his *Faun. Suec. ſp.* 201. by the title of *Tetrao caudâ bifurcâ ſubtus albo punctata*, in *Swediſh*, *Racklebane* or *Roſlare*: the legs of this and the preceding kind are feathered only to the feet: they both inhabit woods in the winter; therefore nature hath not given them the ſame kind protection againſt the cold, as ſhe has the grous and ptarmigan, who muſt undergo all the rigor of the ſeaſon beneath the ſnow, or on the bare ground.

III. The GROUS.

Gallina campestris. *Girald. topogr. Hibern.* 706.

Red Game, Gorcock, or Moor-cock. *Wil. orn.* 177.

Lagopus altera Plinii. *Raii syn. av.* 54.

Moor-cock, or Moor-fowl. *Sib. Scot.* 16.

La Gelinore Hupée. *Brisson av.* i. 209.

La Gelinote d'Ecosse, Bonasa Scotica. *Idem* 199. *tab.* 22. *f.* 1. *Br. Zool.* 85. plate M. 3.

Descr. THE male weighs about nineteen ounces. The length is fifteen inches and a half: the breadth twenty-six. The bill is black: the nostrils covered with red and black feathers: the irides hazel colored. At the base of the lower mandible, on each side, is a white spot: the throat is red. The plumage on the head and neck is of a light tawny red; each feather is marked with several transverse bars of black: The back and scapular feathers are of a deeper red, and on the middle of each feather is a large black spot: the breast and belly are of a dull purplish brown, crossed with numerous narrow dusky lines: the quil feathers are dusky: the tail consists of sixteen feathers of an equal length, all of them (except the four middlemost) are black, and the middle feathers are barred with red: the thighs are of a pale red, barred obscurely with black: the legs and feet cloathed to the very claws with thick soft white feathers; the claws are whitish, very broad and strong.

The female weighs only fifteen ounces. The colors in general are duller than those of the male: the breast and belly are spotted with white: and the tips of some of the coverts of the wings are of the same color.

color. The red naked part that lies above the eyes is leſs prominent than in the male, and the edges not ſo deeply fringed.

We believe this ſpecies to be peculiar to the *Britiſh* iſlands; not having met with any account of it, except in the writings of our countrymen Mr. *Ray* and *Willoughby*, and in M. *Briſſon* under the name of *Bonaſa Scotica*; the ſame writer deſcribes it again by the title of *Attagen*, but his references are either to authors who have copied our naturaliſts, or to ſuch who mean quite another kind. Mr. *Ray* ſeems to think his bird, the other *Lagopus* of *Pliny* *, or the *Francalino* of the modern *Italians*: but the account left us by *Pliny* ſeems too brief and uncertain to determine at this time what ſpecies he intended; and that the *Francolino* is not the ſame with our grous, is evident from the figure of it exhibited by our accurate friend Mr. *Edwards* †.

Theſe birds pair in the ſpring, and lay from ſix to ten eggs: the young brood or packs follow the hen the whole ſummer; in the winter they join in flocks of forty or fifty, and become remarkably ſhy and wild: they always keep on the tops of the hills, are ſcarce ever found on the ſides, and never deſcend into the vallies; their food is the mountain berries, and the tops of heath.

* Eſt et alia nomine eodem, a coturnicibus magnitudine tantum differens, croceo tinctu cibis gratiſſima. lib. x. c. 48.

† Plate 246.

IV. The PTARMIGAN.

La Perdris blanche. *Belon av.* 259.
Lagopus. *Geſner av.* 576.
Perdrix alba ſeu Lagopus, Perdice alpeſtre. *Aldr. av.* ii. 66.
Lagopus. *Plinii* lib. x. c. 48.
Tetrao Lagopus. *Lin. ſyſt.* 274.
Snoripa. *Faun. Suec. ſp.* 203.
La Gelinote blanche. *Briſſon av.* i. 216.
Raii ſyn. av. 55.
White Game, erroneouſly called the white Partridge. *Wil. orn.* 176.
The Ptarmigan. *Sib. Scot.* 16. *Pl. enl.* 129.
Norv. Rype. *Mas Iſlandis*, Riupkarre, *Fæm.* Riupa. *Brunnich.* 199.
Schneehun. *Kram.* 356.
Br. Zool. 86. plates M 4. 5.

THIS bird is well deſcribed by Mr. *Willoughby*, under the name of the white game. Mr. *Briſſon* * joins it with the white partridge of Mr. *Ewards*, plate 72. but theſe two birds differ greatly; the former being above twice the ſize of the *Ptarmigan*; and the color of its ſummer plumage quite different; that of Mr. *Edwards*'s bird being marked with large ſpots of white, and dull orange; that of the *Ptarmigan* is either of a pale brown or aſh-color, motled with ſmall
Deſcr. duſky ſpots; both agree in their winter dreſs, being intirely white, except as follows: in the male a black line occurs between the bill and the eyes; the ſhaft of the ſeven firſt quil feathers are black: the tail of the *Ptarmigan* conſiſts of ſixteen feathers; the two middle of which are aſh-colored, motled with black, and tipt with white; the two next black ſlightly marked with white at their ends, the reſt wholly black; the feathers incumbent on the tail white, and

* *Tom.* i. *p.* 216.

almoſt

almoſt reach the end of it. The plate M 5. of the *folio* edition, exhibits a motly variety of the *Ptarmigan*, at a period it had not quite aſſumed its ſummer dreſs: for this figure, and that of the *ſcaup duck*, the editors of the *folio* edition of this work, are obliged to their worthy countryman (by deſcent) Mr. *Edwards*, who generouſly dedicated theſe laſt efforts of his genius, to the ſervice of the charity ſchool.

Theſe birds are found in this kingdom in the *Scotiſh Highlands* only: their weight is near fourteen ounces; their length thirteen inches three-quarters; their breadth twenty-three. Theſe birds are called by *Pliny*, *Lagopi*, their feet being cloathed with feathers to the claws, as the hare's are with fur: the nails are long, broad and hollow: the firſt circumſtance guards them from the rigor of the winter; the latter enables them to form a lodge under the ſnow, where they lie in heaps to protect themſelves from the cold.

V. The PARTRIDGE.

** With naked Legs.

La Perdris griſe ou Gouache. *Belon av.* 257.
Perdix (Waldhun) *Geſner av.* 669.
Perdix minor ſive cinerea. *Ald. av.* ii. 66.
Wil. orn. 166.
Raii ſyn. av. 57.
Tetrao Perdix. *Lin. ſyſt.* 276.
Rapphona. *Faun. Suec. ſp.* 205.
La Perdrix griſe. *Briſſon av.* i. 219. *Pl. enl.* 27.
Starna. *Zinan* 30.
Agerhoene. *Br.* 201.
Rebhun. *Kram.* 357.
Br. Zool. 86. plate M.

Deſcr. THE male partridge weighs near fifteen ounces; the female near two ounces leſs: the length to the end of the tail thirteen inches; the breadth twenty. The bill is white; the crown of the head is brown ſpotted with reddiſh white. The chin, cheeks and forehead of a deep orange color, but in the females much paler than in the other ſex. The neck and breaſt are prettily marked with narrow undulated lines of aſh-color and black; and in the hind part of the neck is a ſtrong mixture of ruſt color: on the breaſt of the male is a broad mark in form of a horſe-ſhoe, of a deep orange hue; in the female it is leſs diſtinct: each feather on the back is finely marked with ſeveral ſemicircular lines of reddiſh brown and black: the ſcapulars with a narrow white line along their ſhafts, and with black and reddiſh blotchy bars on their webs: the greater quil-feathers are duſky, ſpotted on each web with pale red: it has eighteen feathers in the tail; the ſix outmoſt on each ſide are of a bright ruſt color; the others marked tranſverſely with irregular lines of pale reddiſh brown and black: the legs are of a whitiſh caſt.

The

The nature of this bird is ſo well known, that it will be unneceſſary to detain the readers with any account of it: all writers agree, that its paſſion for venery exceeds that of any bird of the genus; ſhould the readers curioſity be excited to ſee a more particular account, we beg leave to refer them to thoſe authors who have recorded this part of its natural hiſtory *.

VI. The QUAIL.

La Caille. *Belon av.* 263.
Geſner av. 334.
Coturnix Latinorum. *Aldr. av.* ii. 69.
Wil. orn. 169.
Raii ſyn. av. 58.
La Caille. *Briſſon av.* i. 247.
Quaglia. *Zinan* 36.
Tetrao coturnix. *Lin. ſyſt.* 278.
Wachtel. *Faun. Suec. ſp.* 200.
Vagtel. *Brunnich* 202.
Wachtel. *Kram.* 357.
Br. Zool. 87. plate M 6.

THE length of the Quail is ſeven inches and a half; the breadth fourteen: the bill is of a duſky color: the feathers of the head are black, edged with ruſty brown: the crown of the head is divided by a whitiſh yellow line, beginning at the bill and running along the hind part of the neck to the back: above each eye is another line of the ſame color: the chin and throat are of a dirty white: the cheeks ſpotted with brown and white: the breaſt is of a pale yellowiſh red ſpotted with black: the ſcapular feathers and thoſe on the back are marked in their middles with a long pale yellow line, and on their ſides with ferruginous and black bars: the Deſcr

* *Pliny* lib. 10. c. 23. *Wil. orn.* 168. *Edw. preface to Gleanings, part* 2.

coverts

coverts of the wings are reddiſh brown, elegantly barred with paler lines bounded on each ſide with black. The exterior ſide of the firſt quil-feather is white, of the others duſky ſpotted with red: the tail conſiſts of twelve ſhort feathers barred with black and very pale browniſh red; The legs are of a pale hue.

Quails are found in moſt parts of *Great-Britain*; but not in any quantity: they are birds of paſſage; ſome entirely quitting our iſland, others ſhifting their quarters. A gentleman, to whom this work lies under great obligations for his frequent aſſiſtance, has aſſured us, that theſe birds migrate out of the neighbouring inland counties, into the hundreds of *Eſſex*, in *October*, and continue there all the winter: if froſt or ſnow drive them out of the ſtubble fields and marſhes, they retreat to the ſea-ſide; ſhelter themſelves among the weeds, and live upon what they can pick up from the *algæ*, &c. between high and low water mark. Our friend remarks, that the time of their appearance in *Eſſex*, coincides with that of their leaving the inland counties.

Theſe birds are much leſs prolific than the partridge, ſeldom laying more than ſix or ſeven whitiſh eggs, marked with ragged ruſt colored ſpots: they are very eaſily taken, and may be enticed any where by a call.

They are birds of great ſpirit; inſomuch that quail fighting among the *Athenians* was as great an entertainment as cock fighting is in this country. The antients never eat this bird, ſuppoſing them to have been unwholeſome, as they were ſaid to feed on *Hellebore*.

To the birds of this genus we ſhould add the whole tribe of domeſtic land fowl, ſuch as *Peacocks*, *Pheaſants*, &c. but theſe cannot clame even an *European* origin.

India gave us *Peacocks*; and we are assured * they are still found in the wild state, in vast flocks, in the islands of *Ceylon* and *Java*. So beautiful a bird, could not long be permitted to be a stranger in the more distant parts; for so early as the days of *Solomon* †, we find, among the articles imported in his *Tharshish* navies, *Apes* and *Peacocks*. A monarch so conversant in all branches of natural history, *who spoke of trees from the cedar of Libanon, even unto the hyssop that springeth out of the wall: who spoke also of beasts and of fowl*, would certainly not neglect furnishing his officers with instructions for collecting every curiosity in the countries they voyaged to, which gave him a knowlege that distinguished him from all the princes of his time. *Ælian* ‡ relates, that they were brought into *Greece* from some barbarous country; and that they were held in such high esteem, that a male and female were valued at *Athens* at 1000 *drachmæ*, or 32*l*. 5*s*. 10*d*. We are also told, when *Alexander* was in *India* §, he found vast numbers of wild ones on the banks of the *Hyarotis*, and was so struck with their beauty, as to appoint a severe punishment on any person that killed them.

Our common *poultry* came originally from *Persia* and *India*. *Aristophanes* ‖ calls the cock περσικὸς ὄρνις, the *Persian* bird; and tells us, it enjoyed that kingdom before *Darius* and *Megabyzus*: at this time we know that these birds are found in a state of nature in the isles of *Tinian* **, and others of the *Indian* ocean;

* *Knox's hist. of Ceylon*. 28.
† *Kings* i. 10.
‡ *Ælian de nat. an.* lib. v. 21. § *Q. Curtius*, lib. ix.
‖ *Aves, lin.* 483.
** *Dampier's voy.* i. 392. Lord *Anson's voy.* 309.

and

and that in their wild condition their plumage is black and yellow, and their combs and wattles purple and yellow *. They were early introduced into the western parts of the world; and have been very long naturalized in this country: *Cæsar* informing us, they were one of the forbidden foods of the *old Britains*.

Pheasants were first brought into *Europe* from the banks of the *Phasis*, a river of *Colchis*.

Argiva primùm sum transportata carina
Ante mihi notum nil, nisi *Phasis* erat.
Martial. lib. xiii. ep. 72.

Guinea hens, the *Meleagrides* or *Gallinæ numidicæ* of the antients, came originally from *Africa* †. We are much surprized how *Belon* and other learned ornithologists could possibly imagine them to have been the same with our *Turkies*; since the descriptions of the *meleagri* left us by *Athenæus* and other antient writers, agree so exactly with the *Guinea hen*, as to take away (as we should imagine) all power of mistake. *Athenæus* (after *Clytus Milesius*, a disciple of *Aristotle*) describes their nature, form and colors: he tells us, "They want natural affection towards "their young; that their head is naked, and that "on the top of it is a hard round body like a peg "or nail; that from the cheeks hangs a red piece of "flesh like a beard; that it has no wattles like the "common poultry; that the feathers are black spot-

* For this information we are indebted to governor *Loten*.

† *Bosman's history of Guinea*. 248. *Voyages de Marchais* iii. 323.

ted

"ted with white; that they have no ſpurs; and that "both ſexes are ſo like, as not to be diſtinguiſhed by "the ſight *." *Varro* and *Pliny* † take notice of their ſpotted plumage, and the gibbous ſubſtance on their head: ſo that from theſe citations we find every character of the *Guinea hen*, but none that agrees with the *Turky*.

In fact, the *Turky* was unknown to the antient naturaliſts, and even to the *old world* before the diſcovery of *America*. It was a bird peculiar to the new continent, and is now the commoneſt wild fowl of the nothern parts of that country. It was firſt ſeen in *France*, in the reign of *Francis* I. and in *England*, in that of *Henry* VIII. By the date of the reign of theſe monarchs, the firſt birds of this kind muſt have been brought from *Mexico*, whoſe conqueſt was completed, A. D. 1521. The ſhort lived colony of the *French* in *Florida* not being attempted before 1562; nor our more ſucceſsful one in *Virginia*, effected till 1585; when both thoſe monarchs were in their graves.

Ælian, indeed, mentions a bird found in *India* ‡ that ſome writers have ſuſpected to be the *Turky*, but

* Ἔστι δὲ ἄγροικον πρὸς τα ἔκγονα τὸ ὄρνεον, καὶ ὀλιγωρεῖ τῶν νεωτέρων, —ὑπ' αὐτῆς δὲ λόφος σάρκινος σκληρὸς, τρογγύλον ἐξέχοντα τῆς κεφαλῆς ὥσπερ πάτταλον ——πρὸς δὲ ταῖς γνάθοις ἀπὸ τῦ σώματος ἀρξαμένην ἀντὶ πώγωνος μακραν σάρκα, καὶ ἐρυθροτέραν τῶν ὀρνίθων τὴν δὲ τοῖς ὄρνισιν ἐπὶ τῷ ῥύγχει γινομένην, ἣν ἔνιοι κώδωνα καλῦσιν, ἐκ ἔχει, διὸ καὶ ταύτῃ κολοβόν ἐστι.—— σῶμα ἅπαν ποικίλον, μέλανος ὄνυξ τε χρώματος ὅλα πτίλοις λευκοῖς —— σκέλη καὶ ἔκεντρα —— παραπλήσιαι δὲ εἰσὶν αἱ θήλειαι τοῖς ἄρρεσιν· διὸ καὶ δυσδιάκριτόν ἐστι τὸ τῶν μελεαγρίδων γένος. Athenæus 655.

† *Varro*. lib. 3. c. 9. *Pliny*. lib. 10. c. 26.

‡ *Æliani hiſt. an.* lib. xvi. c. 2.

we

we conclude with *Geſner*, that it was either the *Peacock*, or ſome bird of that genus. On conſulting ſome gentlemen who have long reſided in the *Indies*, we find, that though the *Turky* is bred there, it is only conſidered as a domeſtic bird, and not a native of the country.

Genus XIV. The BUSTARD.

I. The BUSTARD.

L'Oſtarde. *Belon av.* 235.
Otis, vel Biſtarda. *Geſner av.* 484, 486.
Otis five Tarda. *Aldr. av.* ii. 39.
Wil. orn. 178.
Raii ſyn. av. 58.
Edw. tab. 73, 74.
L'Outarde. *Briſſon av.* v. 18,
Otis tarda. *Lin. ſyſt.* 264.
Faun. Suec. ſp. 196.
Trap. *Kram.* 355.
Br. Zool. 87. plate N.

Deſcr. THE buſtard is the largeſt of the *Britiſh* land fowl; the male at a medium weighing twenty-five pounds; there are inſtances of ſome very old ones weighing twenty-ſeven. The breadth nine feet; the length near four. Beſides the ſize and difference of color; the male is diſtinguiſhed from the female by a tuft of feathers about five inches long on each ſide the lower mandible. Its head and neck are aſh-colored: the back is barred tranſverſely with black and bright ruſt color: the greater quil feathers are black: the belly white: the tail is marked with broad red and black bars, and conſiſts of twenty feathers: the legs duſky.

The

The female is about half the ſize of the male: the crown of the head is of a deep orange traverſed with black lines; the reſt of the head is brown. The lower part of the foreſide of the neck is aſh-colored: in other reſpects it reſembles the male, only the colors of the back and wings are far more dull.

Theſe birds inhabit moſt of the open countries of the ſouth and eaſt parts of this iſland, from *Dorſetſhire*, as far as *Merch* and *Lothian* in *Scotland* *. They are exceeding ſhy, and difficult to be ſhot; run very faſt, and when on the wing can fly, though ſlowly, many miles without reſting. It is ſaid that they take flight with difficulty, and are ſometimes run down with grehounds. They keep near their old haunts, ſeldom wandering above twenty or thirty miles. Their food is corn and other vegetables, and thoſe large earth-worms that appear in great quantities on the *Downs*, before ſun-riſing in the ſummer. Theſe are replete with moiſture, anſwer the purpoſe of liquids, and enable them to live long without drinking on thoſe extenſive and dry tracts. Beſides this, nature hath given the males an admirable magazine for their ſecurity againſt drought, being a pouch †, whoſe entrance lies immediately under the tongue, and which is capable of holding near ſeven quarts; and this they probably fill with water, to ſupply the hen when

* *Sib. Scot.* 16.

† The world is obliged to the late Dr. *Douglas* for this diſcovery; and to Mr. *Edwards* for communicating it.

ſitting

ſitting, or the young before they can fly. Buſtards lay only two eggs, of the ſize of thoſe of a gooſe, of a pale olive brown, marked with ſpots of a darker color; they make no neſt, only ſcrape a hole in the ground. In autumn they are (in *Wiltſhire*, generally found in large turnep fields near the Downs, and in flocks of fifty or more.

To this bird we may add the little Buſtard of Mr. *Edwards*, tab. 251. The *Canne petiere* of the *French*, *Wil. orn.* 179. one of which was ſhot in *Cornwal* 1751. this being the only one that we have heard of in this kingdom, and probably a ſtrayed bird, it muſt be denied a place in this work.

Genus XV. PIGEONS.

I. The COMMON PIGEON.

La Pigeon privè. *Belon av.* 313.
Columba vulgaris. *Geſner av.* 279. Livia. 307.
Columba domeſtica. *Aldr. av.* ii. 225.
Common wild Dove, or Pigeon. *Wil orn.* 180. and the Stock Dove, or Wood Pigeon *. 185.
Raii ſyn. av. 59, 62.
Le Pigeon domeſtique. *Briſſon av.* i. 68.
Le Biſet. 82.
Columba Oenas. *Lin. ſyſt.* 279.
Skogs dufwa, Dufwa, Hemdufwa. *Faun. Suec. ſp.* 207.
Kirke-Due, Skov-Due. *Brunnich.* 203.
Feldtaube, Hauſtaube, Hohltaube. *Kram.* 358.
Br. Zool. 88. plate 88.

THE tame pigeon, and all its beautiful varieties, derive their origin from one ſpecies, the *Stock Dove*: the *Engliſh* name implying its being the

* Columba livia. *Aldr. av.* ii. 234. et Oenas, ſeu vinago 233.

ſtock or *ſtem* from whence the other domeſtic kinds ſprung. We never ſaw this bird in its wild condition; but are obliged to borrow the deſcription partly from Mr. *Willoughby*, partly from a drawing that we were favored with from the magnificent collection of *Taylor White*, eſq. Its characters in the ſtate neareſt that of its origin, is a deep bluiſh aſh color; the breaſt Deſcr. daſhed with a fine changeable green and purple; the ſides of the neck with ſhining copper color; its wings marked with two black bars, one on the coverts of the wings, the other on the quil-feathers. The back white, and the tail barred near the end with black. In the wild ſtate it breeds in holes of rocks, and hollows of trees, for which reaſon ſome writers ſtile it *columba cavernalis* * in oppoſition to the Ring Dove, which makes its neſt on the boughs of trees. Nature ever preſerves ſome agreement in the manners, characters, and colors of birds reclamed from their wild ſtate. This ſpecies of pigeon ſoon takes to build in artificial cavities, and from the temptation of a ready proviſion becomes eaſily domeſticated. The drakes of the tame duck, however they may vary in color, ever retain the mark of their origin from our *Engliſh* mallard, by the two curled feathers of the tail: and the tame gooſe betrays its deſcent from the wild kind, by the invariable whiteneſs of its rump, which they always retain in both ſtates.

The varieties produced from the domeſtic pigeon are very numerous, and extremely elegant; theſe are diſtinguiſhed by names expreſſive of their ſeveral pro-

* The *Columba ſaxatilis*, a ſmall ſort, that is frequent on moſt of our cliffs, is only a variety of the wild pigeon. *Aldr. av.* ii. 227.

perties, such as *Tumblers*, *Carriers*, *Jacobines*, *Croppers*, *Powters*, *Runts*, *Turbits*, *Owls*, *Nuns*, &c. * The most celebrated of these is the *Carrier*, which from the superior attachment that pigeon shews to its native place, is employed in many countries as the most expeditious courier: the letters are tied under its wing, it is let loose, and in a very short space returns to the home it was brought from, with its advices †. This practice was much in vogue in the *East*, and at *Scanderoon*, till of late years ‡, used on the arrival of a ship, to give to the merchants at *Aleppo* a more expeditious notice than could be done by any other means. In our own country, these aerial messengers have been employed for a very singular purpose, being let loose at *Tyburn* at the moment the fatal cart is

* *Vide Wil. orn. Moore's Columbarium*, and a treatise on domestic pigeons, published in 1765. The last illustrates the names of the birds, with several neat figures.

† This custom was observed by that legendary traveller, Sir *John Maundevile*, knight, warrior and pilgrim; who, with the true spirit of religious chivalry, voyaged into the *East*, and penetrated as far as the borders of *China*, during the reigns of *Edward* II. and III.

In that contree (sayś he) and other contrees bezonde, thei han a custom, whan thei schulle usen werre, and whan men holden sege abouten cytee or castelle, and thei with innen dur not senden out messagers with letters, fro lord to lord, for to aske sokour, thei maken here letters and bynden hem to the nekke of a *Colver*, and leten the *Colver* flee; and the *Colveren* ben so taughte, that thei fleen with tho letters to the verry place, that men wolde sende hem to. For the *Colveres* bėn norysscht in tho places, where thei ben sent to; and thei senden hem thus, for to beren here letters. And the *Colveres* retournen azen, where as thei ben norisscht and so thei don comounly. The voiage & travaile of Sir *J. Maundevile*, knight, ed. 1727.

‡ Dr. *Russel* informs us, that the practice is left off. *Hist. Aleppo*, 66.

drawn

drawn away, to notify to diſtant friends, the departure of the unhappy criminal.

In the *Eaſt*, the uſe of theſe birds ſeems to have been improved greatly, by having, if we may uſe the expreſſion, relays of them ready to ſpread intelligence to all parts of the country. Thus the governor of *Damiata* circulated the news of the death of *Orrilo*:

Toſto che'l Caſtellan di *Damiata*
Certificoſſi, ch'era morto *Orrilo*,
La *Colomba* laſciò, ch'avea legata
Sotto l'ala la lettera col filo.
Quelle andò al *Cairo*, ed indi fu laſciata
Un' altra altrove, come quivi e ſtilo:
Si, che in pochiſſime ore andò l'avviſo
Per tutto *Egitto*, ch'era *Orrilo* ucciſo *.

But the ſimple uſe of them was known in very early times: *Anacreon* tells us, he conveyed his billet-doux, to his beautiful *Bathyllus*, by a dove.

Εγὼ δ' Ἀνακρέοντι
Διακονῶ τοσαῦτα·
Καὶ νῦν οἵας ἐκεῖνῳ
Ἐπιστολὰς κομίζω †.

I am now *Anacreon*'s ſlave,
And to me entruſted have
All the o'erflowings of his heart,
To *Bathyllus* to impart;
Each ſoft line, with nimble wing,
To the lovely boy I bring.

* As ſoon as the commandant of *Damiata* heard that *Orrilo* was dead, he let looſe a pigeon, under whoſe wing he had tied a letter; this fled to *Cairo*, from whence a ſecond was diſpatched to another place, as is uſual; ſo that in a very few hours, all *Egypt* was acquainted with the death of *Orrilo*. *Ariosto, canto* 15.

† *Anacreon, ode* 9. εἰς περιστεράν.

Tauroſthenes alſo, by means of a pigeon he had decked with purple, ſent advice to his father, who lived in the iſle of *Ægina*, of his victory in the *Olympic* games, on the very day he had obtained it *. And, at the ſiege of *Modena*, *Hirtius* without, and *Brutus* within the walls, kept, by the help of pigeons, a conſtant correſpondence; baffling every ſtratagem of the beſieger *Antony* †, to intercept their couriers. In the times of the *Cruſades*, there are many more inſtances of theſe birds of peace being employed in the ſervice of war: *Joinville* relates one during the cruſade of *Saint Louis* ‡; and *Taſſo* another, during the ſiege of *Jeruſalem* §.

The nature of pigeons is to be gregarious; to lay only two eggs; to breed many times in the year ‖; to bill in their courtſhip; for the male and female to ſit by turns, and alſo to feed their young; to caſt their proviſion out of their craw into the young ones mouths; and to have a note mournful, or plaintive.

* *Ælian var. hiſt.* lib. ix. 2. *Pliny, lib.* x. *c.* 24. ſays, that ſwallows have been made uſe of for the ſame purpoſe.

† *Pliny*, lib. x. c. 37. *Exclames*, Quid vallum et vigil obſidio atque etiam retia amne pretenta profuere *Antonio, per cælum eunte nuncio?*

‡ *Joinville*, 638. *app.* 35.

§ *Arioſto, canto* xv. 90.

‖ So quick is their produce, that the author of the *Oeconomy of nature* obſerves, that in the ſpace of four years, 14,760 may come from a ſingle pair. *Stillingfleet's tracts.* 75.

II. The

II. The RING-DOVE.

Le Ramier. *Belon av.* 307.
Phaſſa. *Belon obſ.* 13.
Palumbus. *Geſner av.* 310.
Palumbus major ſive torquatus. *Aldr. av.* ii. 227.
Colombaccio. *Olina* 54.
Ring-dove, Queeſt, or Cuſhat. *Wil. orn.* 185.
Le Pigeon Ramier. *Briſſon av.* i. 89.
Raii ſyn. av. 62.
Columba palumbus. *Lin. ſyſt. ſp.* 282.
Ringdufwa, Siutut. *Faun. Suec. ſp.* 208.
Wildtaube, Ringltaube. *Kram.* 359.
Dan. Ringel-due, *Bornholmis*, Skude. *Brunnich* 204.
Br. Zool. 89. plate O.

THIS ſpecies forms its neſt of a few dry ſticks in the boughs of trees: attempts have been made to domeſticate them, by hatching their eggs under the common pigeon in dove-houſes; but as ſoon as they could fly, they always toke to their proper haunts. In the beginning of the winter they aſſemble in great flocks, and leave off cooing; which they begin in *March*, when they pair. The ring-dove is the largeſt pigeon we have; and may be at once diſtinguiſhed from all others by the ſize. Its weight is about twenty ounces: its length eighteen inches: its breadth thirty. The head, back, and coverts of the wings are of a bluiſh aſh color: the lower ſide of the neck and the breaſt are of a purpliſh red daſhed with aſh color: on the hind part of the neck is a ſemi-circular line of white; above and beneath that the feathers are gloſſy, and of changeable colors as oppoſed to the light. The belly is of a dirty white: the greater quil-feathers are duſky; the reſt Deſcr.

aſh colored: underneath the baſtard wing is a white ſtroke pointing downwards.

III. The TURTLE.

La Turtrelle. *Belon av.* 309.
Turtur. *Geſner av.* 316.
Turtur. *Aldr. av.* ii. 235.
Tortora. *Olina* 34.
The Turtle-dove. *Wil. orn.* 183.
Raii ſyn. av. 61.
Wilde Turtel taube. *Kram.* 359.
Le Tourterelle. *Briſſon av.* i. 92.
Br. Zool. 89*. plate O 1.

THIS ſpecies is found in *Buckinghamſhire*, *Glouceſterſhire*, *Shropſhire*, and in the *Weſt* of *England*. They are ſhy and retired birds, breeding in thick woods, generally of oak: we believe that they reſide in *Buckinghamſhire* during the breeding ſeaſon, migrating into the other countries in autumn. The length is twelve inches and a half; its breadth twenty-one. The irides are of a fine yellow: a beautiful crimſon circle encompaſſes the eye-lids. The chin and forehead are whitiſh: the top of the head aſh-colored mixed with olive: on each ſide of the neck is a ſpot of black feathers prettily tipt with white: the back aſh-colored, bordered with olive brown: the ſcapulars and coverts of a reddiſh brown ſpotted with black: the quil-feathers of a duſky brown, the tips and outward edges of a yellowiſh brown: the breaſt of a light purpliſh red, having the verge of each feather yellow; the belly white: the ſides and inner coverts of the wings bluiſh. The tail is three

Deſcr.

* The figure in the *folio* edition of this work ſeems to have been taken from a young bird.

inches and a half long; the two middlemoſt feathers are of a duſky brown; the others black with white tips: the end and exterior ſide of the outmoſt feathers wholly white.

Genus XVI. THRUSHES.

I. The MISSEL-BIRD.

La Grive ou Siferre, *Belon av.* 324.
Turdus viſcivorus. *Geſner av.* 759.
Aldr. av. ii. 273.
Tordo. *Olina* 25.
Miſſel-bird, or Shrite. *Will. orn.* 187.
Raii ſyn. av. 64.
Miſſeltoe-thruſh, or Shreitch. *Charlton ex.* 89.
Tordo viſcada, Zicchio. *Zinan.* 39.
La groſſe grive, Turdus major. *Briſſon av.* ii. 200.
Lin. ſyſt. 291.
Biork-Traſt. *Faun. Suec. ſp.* 216.
Dobbelt-Kramsfugl. *Brunnich.* 231.
Zariker, Miſtler, Zerrer. *Kram.* 361.
Br. Zool. 90. plate P. f. 1.

THIS is diſtinguiſhed from all of the kind by its ſuperior ſize; weighing near five ounces. Its length is eleven inches: its breadth ſixteen and a half: in colors it very much reſembles that well known bird the Throſtle; and differs materially only in theſe particulars, *viz.* The ſpots on the breaſt are larger; and the inner coverts of the wings in this are white, in the Throſtle yellow. Deſcr.

Theſe birds build their neſts in buſhes, or on the ſide of ſome tree, generally an aſh, and lay four or five eggs: their note of anger or fear is very harſh, between a chatter and a ſkreek; from whence ſome of its

its *Engliſh* names: its ſong though is very fine, which it begins in the ſpring, ſitting on the ſummit of a high tree. It feeds on inſects, holly and miſſeltoe berries; the *Welſh* call it *Pen y llwyn*, or the maſter of the coppice, as it will drive all the leſſer ſpecies of thruſhes from it. The antients believed that the *miſſeltoe* (the baſis of bird-lime) could not be propagated but by the berries that had paſt through the body of this bird; and on that is founded the proverb of *Turdus malum ſibi cacat*.

It may be obſerved, that this is the largeſt bird, *Britiſh* or *foreign* (within our knowlege) that ſings or has any harmony in its note; the notes of all ſuperior being either ſcreaming, croaking, chattering, &c. the pigeon kind excepted, whoſe ſlow plaintive continued monotone has ſomething ſweetly ſoothing in it. *Thompſon* (the naturaliſt's poet) in the concert he has formed among the feathered tribe, allows the imperfection of voice in the larger birds, yet introduces them as uſeful as the baſe in chorus, though unpleaſing by itſelf:

> The jay, the rook, the daw,
> And each harſh pipe (diſcordant heard alone)
> Aid the full concert: while the ſtock-dove breaths
> A melancholy murmur thro' the whole *.

* *Seaſons. Spring.* l. 606.

II. The

II. The FIELDFARE.

La Litorne, *Belon av.* 328.
Turdus pilaris. *Geſner av.* 753. *Aldr. av.* ii. 274. *Wil. orn.* 188. *Raii ſyn. av.* 64.
La Litourne, ou Tourdelle. *Briſſon av.* ii. 214. *Lin. ſyſt.* 291.
Kramsfogel, ſnoſkata. *Faun. Suec. ſp.* 215.
Dan. Dobbelt Kramsfugl. *Cimbris*, Snarrer. *Norvegis*, Graae Troſt, Field-Troſt, Norden-Vinds Pibe, *Bornholmis*, Simmeren. *Br.* 232.
Kranabets vogel, Kranabeter. *Kram.* 361.
Br. Zool. 90. plate P. 2. f. 1.

THIS bird paſſes the ſummer in the northern parts of *Europe*; alſo in lower *Auſtria* *. It breeds in the largeſt trees; † feeds on berries of all kinds, and is very fond of thoſe of the juniper. Fieldfares viſit our iſlands in great flocks about *Michaelmas*, and leave us the latter end of *February*, or the beginning of *March*. We ſuſpect that the birds that migrate here, come from *Norway*, &c. forced by the exceſſive rigor of the ſeaſon in thoſe cold regions; as we find that they winter as well as breed in *Pruſſia*, *Auſtria* ‡, and the moderate climates.

Theſe birds weigh generally about four ounces; their length is ten inches, their breadth ſeventeen. The head is aſh-colored inclining to olive, and ſpotted with black; the back and greater coverts of the wings of a fine deep cheſnut; the rump aſh-colored: the tail is black; the lower parts of the two middlemoſt feathers, and the interior upper ſides of the outmoſt feathers excepted; the firſt being aſh-colored, the latter white. The legs are black; the talons very ſtrong. Deſcr.

* *Kramer elench.* 361. † *Faun. Suec. ſp.* 78. ‡ *Klein hiſt. av.* 178.

III. The THROSTLE.

La petite Grive. *Belon av.* 226.
Turdus minor alter. *Geſner av.* 762.
Aldr. av. ii. 275.
Storno. *Olina* 18.
Mavis, Throſtle, or Song thruſh. *Wil. orn.* 188.
Raii ſyn. av. 64.
La petite Grive, Turdus minor. *Briſſon av.* ii. 205.
Turdus muſicus. *Lin. ſyſt.* 292. *Faun. Suec. ſp.* 217.
Turdus in altiſſimis. *Klein ſtem. av. tab.* 13.
Weindroſchl, Weiſſdroſchl, Sommerdroſchl. *Kram.* 361.
Cimbris & Bornholmis, Vündroſſel. *Norvegis*, Tale Traſt. *Br.* 236.
Br. Zool. 91. plate P. f. 2.

Deſcr. THIS ſpecies weighs three ounces; its length is nine inches; its breadth thirteen and a half, for a farther deſcription, the reader is referred to that of the firſt kind. The throſtle is the fineſt of our ſinging birds, not only for the ſweetneſs and variety of its notes, but for long continuance of its harmony; for it obliges us with its ſong for near three parts of the year. Like the miſſel-bird, it delivers its muſic from the top of ſome high tree; but to form its neſt deſcends to ſome low buſh or thicket: the neſt is made of earth, moſs, and ſtraws, and the inſide is curiouſly plaiſtered with clay. It lays five or ſix eggs, of a pale bluiſh green, marked with duſky ſpots.

IV. The

IV. The REDWING.

Le Mauvis. *Belon av.* 327.
Turdus minor. *Geſner av.* 761.
T. Illas ſeu Tylas. *Aldr. av.* ii. 275.
Redwing, Swinepipe, or Wind Thruſh. *Wil. orn.* 189.
Ruai ſyn. av. 54.
Le Mauvis. *Briſſon av.* ii. 208. *tab.* 20. *fig.* 1.
Pl. enl. 51.
Turdus iliacus. *Lin. ſyſt.* 292.
Klera, Kladra, Tall-Traſt. *Faun. Suec. ſp.* 218.
Rothdroſchl, Walddroſchl, Winterdroſchl. *Kram.* 361.
Br. Zool. 91. plate P. f. 2.

THESE birds appear in *Great-Britain* a few days before the fieldfare; they come in vaſt flocks, and from the ſame countries as the latter. With us they have only a diſagreeable piping note; but in *Sweden* during the ſpring they ſing very finely, perching on the top of ſome tree among the foreſts of maples. They build their neſts in hedges, and lay ſix bluiſh green eggs ſpotted with black *.

They have a very near reſemblance to the throſtle; but are leſs, only weighing two ounces and a quarter: their colors are much the ſame; only the ſides under the wings and the inner coverts in this are of a reddiſh orange; in the throſtle yellow: above each eye is a line of yellowiſh white, beginning at the bill and paſſing towards the hind part of the head. The vent feathers are white. Deſcr.

Beſides theſe three ſorts of throſtles, the author of the *epitome of the art of husbandry* †, mentions a fourth kind under the name of the *heath throſtle*, which he commends as far ſuperior to the others in its ſong:

* *Faun. Suec. p.* 218.
† *By* J. B. *gent. third edit.* 1685.

he

he ſays it is the leſt of any, and may be known by its dark breaſt; that it builds its neſt by ſome heath-ſide, is very ſcarce, and will ſing nine months in the year.

V. The BLACKBIRD.

Le Merle noir. *Belon av.* 320. *Pl. enl.* 2.
Merula. *Geſner av.* 602. Turdus merula. *Lin. ſyſt.* 295.
Aldr. av. ii. 276. Kohl-Traſt. *Faun. Suec. ſp.* 220.
Merlo. *Zinan.* 39. *Olina* 29. *Dan. & Norvegis* Solſort. *Br.* 234.
Wil. orn. 190.
Raii ſyn. av. 65. Amſel, Amarl. *Kram.* 360.
La Merle. *Briſſon av.* ii. 227. *Br. Zool.* 92.

THIS bird is of a very retired and ſolitary nature; frequents hedges and thickets, in which it builds earlier than any other bird: the neſt is formed of moſs, dead graſs, fibres, *&c.* lined or plaiſtered with clay, and that again covered with hay or ſmall ſtraw. It lays four or five eggs of a bluiſh green color, marked with irregular duſky ſpots. The note of the male is extremely fine, but too loud for any place except the woods: it begins to ſing early in the ſpring, continues its muſic part of the ſummer, deſiſts in the moulting ſeaſon; but reſumes it for ſome time in the firſt winter months.

Defer. The color of the male, when it has attained its full age, is of a fine deep black, and the bill of a bright yellow: the edges of the eyelids yellow. When young, the bill is duſky, and the plumage of a ruſty black, ſo that they are not to be diſtinguiſhed from the females; but at the age of one year they attain their proper color.

VI. The

VI. The RING-OUZEL.

Le Merle ou Collier. *Belon av.* 318.
Merula torquata. *Geſner av.* 607.
Merlo alpeſtre. *Aldr. av.* ii. 282.
Wil. orn. 194. Rock or Mountain-ouzel. 195.
Mwyalchen y graig. *Camden Brit.* 795.
Raii ſyn. av. 65.
Morton Northampt. 425.
Le Merle a Collier. *Briſſon av.* ii. 235.
Turdus torquatus. *Lin. ſyſt.* 296. *Faun. Suec. ſp.* 221.
Dan. Ringdroſſel. *Norvegis* Ring Troſt. *Br.* 237.
Ringlamſel. *Kram.* 360.
Br. Zool. 92. plate P. 1. f. 1.

THE ring-ouzel inhabites the mountanous parts of theſe iſlands; and are found in ſmall flocks of five or ſix. In ſize they are ſuperior to the black bird: their length is eleven inches; their breadth ſeventeen. The bill in ſome is wholly black, in others the upper half is yellow: on each ſide the mouth are a few briſtles: the head and whole upper part of the body are duſky, edged with pale brown: the quil-feathers, and the tail are black. The coverts of the wings, the upper part of the breaſt, and the belly are duſky, ſlightly edged with aſh-color. The middle of the breaſt is adorned with a white creſcent, the horns of which point to the hind part of the neck. In ſome birds this is of a pure white, in others of a dirty hue. In the females and in young birds this mark is wanting, which gave occaſion to ſome naturaliſts to form two ſpecies of them. Deſcr.

VII. The

VII. The WATER-OUZEL.

Merula aquatica. *Geſner av.* 608.
Lerlichirollo. *Aldr. av.* iii. 186.
Water-craw. *Turner.*
The Water-ouzel, or Water-crake. *Wil. orn.* 149.
Rail ſyn. av. 66.
Sturnus cinclus. *Lin. ſyſt.* 290.
Watnſtare. *Faun. Suec. ſp.* 214.
Le Merle d'eau. *Briſſon av.* v. 252.
Merlo aquatico. *Zinan.* 109.
Norvegis, Foſſe Fald, Foſſe Kald, Quærn Kald, Stroem-Stær, Bække Fugl. *Brunnich.* 230.
Waſſer-amſel, Bach-amſel. *Kram.* 374.
Br. Zool. 92. plate P. 1. f. 2.

THIS bird frequents ſmall brooks, particularly thoſe with ſteep banks, or that run through a rocky country. It is of a very retired nature, and is never ſeen but ſingle, or with its mate. It breeds in holes in the banks, and lays five white eggs adorned with a fine bluſh of red. It feeds on inſects and ſmall fiſh; and as Mr. *Willoughby* obſerves, though not web-footed, will dart itſelf after them quite under water. The neſt is conſtructed in a curious manner, of hay and fibres of roots, and lined with dead oak leaves, having a portico, or grand entrance made with green moſs.

Deſcr. Its weight is two ounces and a half: the length ſeven inches one quarter: the breadth eleven: the bill is narrow, and compreſſed ſideways: the eyelids are white: the head, cheeks, and hind part of the neck are duſky, mixed with ruſt color: the back, coverts of the wings, and of the tail alſo dusky, edged with bluiſh aſh-color: the throat and breaſt white: the belly ferruginous, vent feathers a deep aſh-color: the legs are of a pale blue before, black behind:

behind: the tail ſhort and black, which it often flirts up, as it is ſitting.

Theſe are all the birds of this genus that can clame a place in this work. The roſe colored ouzel, *Wil. orn.* 194. *Edw.* 20. a foreign bird, has been ſhot at *Norwood* near *London*; for its hiſtory we refer our readers to the appendix.

Genus XVII. The STARE.

I. The STARE.

L'Eſtourneau. *Belon av.* 321.
Sturnus. *Geſner av.* 746.
Aldr. av. ii. 284.
Stare, or Starling. *Wil. orn.* 196.
Raii ſyn. av. 67.
L'Etourneau. *Briſſon av.* ii. 439.
Sanſonet. *Pl. enl.* 75.
Storno. *Zinan.* 69.
Olina 18.
Sturnus vulgaris. *Liv. ſyſt.* 290.
Stare. *Faun. Suec. ſp.* 213.
Haſſelquiſt. itin. 284.
Danis & Norvegis Stær. *Br.* 249.
Starl. *Kram.* 362.
Br. Zool. 93. plate P. 2. f. 1.

THE Stare breeds in hollow trees, eaves of houſes, towers, ruins, cliffs, and often in high rocks over the ſea, ſuch as thoſe of the *Iſle* of *Wight*. It lays four or five eggs, of a pale greeniſh aſh color: and makes its neſt of ſtraw, ſmall fibres of roots, and the like. In winter ſtares aſſemble in vaſt flocks, and feed on worms and inſects. Their fleſh is ſo remarkably bitter as to be ſcarce eatable; they are very docil birds; and may be taught to ſpeak.

Deſcr. The weight of the male of this ſpecies is about three ounces; that of the female rather leſs. The length is eight inches three quarters: the breadth fourteen inches

inches and a half: the bill is an inch and one-fourth long, ſtrait, very much depreſſed, and the baſe of the lower mandible deeply furrowed on each ſide: the noſtrils are oval ſurrounded by a prominent rim: the tongue is hard, horny and cloven: the irides hazel, whiter on their upper part: the feathers on the head, neck and upper part of the back are black, varied with a moſt beautiful green and purple as oppoſed to different lights; the tips of theſe on the head are of a yellowiſh brown; thoſe on the neck are white: their form is ſingular, being long, narrow and pointed: the lower part of the back, the rump, the coverts of the wings, and the lower part of the breaſt are black gloſſed with green; the tips of the feathers of all except thoſe on the breaſt are yellowiſh, thoſe of the latter white: the belly is gloſſed over with a deep purple: the vent feathers are black, very ſlightly tinged with green, and their edges are white: the firſt and ſecond quil-feathers are dusky, and the lower part of their exterior ſide is ſlightly edged with a reddiſh yellow: the exterior webs of all the others are alſo dusky; the interior incline to aſh-color, but both are edged with the ſame color as the former, only more deeply on the feathers next the back: beneath this yellowiſh border that adorns the leſſer quil-feathers is another of black: a changeable green alſo marks their exterior ſides. The tail is ſhort; the wings reach, when cloſed, within half an inch of the end: the middle of each feather is of a deep aſh-color; then ſucceeds a border of black edged with a yellowiſh red. The legs and feet are black tinged with red.

Genus

BOUND
1928